

**PACIFIC SALMON COMMISSION  
JOINT CHINOOK  
TECHNICAL COMMITTEE REPORT**

**2009 ANNUAL REPORT OF THE  
EXPLOITATION RATE ANALYSIS  
AND MODEL CALIBRATION**

**REPORT TCCHINOOK (09)-3**

December 22, 2009

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## LIST OF ACRONYMS WITH DEFINITIONS

<b>AABM</b>	Aggregate Abundance Based Management	<b>MSF</b>	Mark-Selective Fishery
<b>AC</b>	Allowable Catch	<b>MSH</b>	Maximum sustainable harvest
<b>AI</b>	Abundance Index	<b>MSY</b>	Maximum Sustainable Yield for a stock, in adult equivalents
<b>ADF&amp;G</b>	Alaska Department of Fish & Game	<b>MSY ER</b>	Exploitation Rate sustainable at the escapement goal for a stock, in AEQs
<b>AEQ</b>	Adult Equivalent	<b>NBC</b>	Northern British Columbia Dixon Entrance to Kitimat including Queen Charlotte Islands
<b>Agreement</b>	June 30, 1999 PST Annex and the related Agreement	<b>NA</b>	Not Available
<b>AUC</b>	Area Under the Curve	<b>NBC</b>	Northern British Columbia Dixon Entrance to Kitimat including Queen Charlotte Islands
<b>AWG</b>	Analytical Working Group of the CTC	<b>NM</b>	Nautical Mile
<b>BCAFC</b>	British Columbia Aboriginal Fisheries Commission	<b>NMFS</b>	National Marine Fisheries Service
<b>BTR</b>	Base Terminal Run	<b>NOC</b>	Oregon Coastal North Migrating Stocks
<b>C&amp;S</b>	Ceremonial & Subsistence	<b>NPS</b>	North Puget Sound
<b>CBC</b>	Central British Columbia Fishing area -- Kitimat to Cape Caution	<b>NPS-S/F</b>	North Puget Sound Summer/Fall Chinook stock
<b>CCMP</b>	Comprehensive Chinook Management Plan	<b>NR</b>	Not Representative
<b>CDFO</b>	Canadian Department of Fisheries & Oceans	<b>NWIFC</b>	Northwest Indian Fisheries Commission
<b>CI</b>	Confidence Interval	<b>ODFW</b>	Oregon Department of Fish & Wildlife
<b>CNR</b>	Chinook Non-retention	<b>PFMC</b>	Pacific Fisheries Management Council
<b>CR</b>	Columbia River	<b>PS</b>	Puget Sound
<b>CRITFC</b>	Columbia River Intertribal Fish Commission	<b>PSC</b>	Pacific Salmon Commission
<b>CREMP</b>	Columbia River Fishery Management Plan	<b>PSARC</b>	Pacific Scientific Advice Review Committee
<b>CTC</b>	Chinook Technical Committee	<b>PSMFC</b>	Pacific States Marine Fisheries Commission
<b>CUS</b>	Columbia Upriver Spring Chinook stock	<b>PST</b>	Pacific Salmon Treaty
<b>CWT</b>	Coded Wire Tag	<b>QDNR</b>	Quinalt Department of Natural Resources, Division of fisheries
<b>DIT</b>	Double Index Tag	<b>QIN</b>	Quinalt Nation
<b>ESA</b>	U S Endangered Species Act	<b>QCI</b>	Queen Charlotte Islands
<b>Est+fw</b>	Estuary Plus Fresh Water Area	<b>RER</b>	Recovery Exploitation Rate
<b>FL</b>	Fork Length	<b>S<sub>MSY</sub></b>	Escapement producing MSY
<b>FMP</b>	PFMC Framework Management Plan	<b>SEAK</b>	Southeast Alaska Cape Suckling to Dixon Entrance
<b>FNC</b>	First Nations Caucus	<b>SG</b>	Strait of Georgia
<b>FOG</b>	Fisheries Operational Guidelines	<b>SPS</b>	South Puget Sound
<b>FR</b>	Fraser River	<b>SSRAA</b>	Southern Southeast Regional Aquaculture Association
<b>GCG</b>	Gene Conservation Group	<b>SWVI</b>	Southwest Vancouver Island
<b>GW</b>	Gitwinksihlkw	<b>TAC</b>	Technical Advisory Committee
<b>GS</b>	Strait of Georgia	<b>TBR</b>	Transboundary Rivers
<b>HOR</b>	Hatchery Origin Returns	<b>TTC</b>	Transboundary Technical Committee
<b>IDFG</b>	Idaho Department of Fish & Game	<b>UFR</b>	Upper Fraser River
<b>IDL</b>	InterDam Loss	<b>UGS</b>	Upper Strait of Georgia
<b>IM</b>	Incidental Mortality	<b>USCTC</b>	U S members of the CTC
<b>ISBM</b>	Individual stock based management	<b>USFWS</b>	U S Fish & Wildlife Service
<b>LFR</b>	Lower Fraser River	<b>UW</b>	University of Washington
<b>LGS</b>	Lower Strait of Georgia	<b>WA/OR</b>	Ocean areas off Washington and Oregon North of Cape Falcon
<b>mar</b>	Marine Area	<b>WAC</b>	Washington Coast (Grays Harbor northward)
<b>mar+fw</b>	Marine Plus Fresh Water Area	<b>WACO</b>	Washington, Oregon, Columbia River Chinook stock group
<b>MOC</b>	Mid Oregon Coast	<b>WCVI</b>	West Coast Vancouver Island excluding Area 20
<b>MRP</b>	Mark-Recovery Program	<b>WDFW</b>	Washington Department of Fisheries and Wildlife

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## EXECUTIVE SUMMARY

This report contains the principal results of the annual exploitation rate assessment of CWT data through 2008 and the final preseason Chinook model calibration for 2009 (CLB 0907). Results include the Abundance Indices (AIs) for the AABM fisheries and ISBM indices for each party (country).

### AABM ABUNDANCE INDICES AND ASSOCIATED CATCHES

The pre- and postseason AIs for the three AABM fisheries, Southeast Alaska All Gear (SEAK), Northern British Columbia Troll and Queen Charlotte Islands Sport (NBC), and West Coast Vancouver Island Troll and Outside Sport (WCVI) are presented in Table 1. The Agreement specifies that the AABM fisheries are to be managed through the use of the AIs. Each calibration provides the first postseason AIs for the previous year and the preseason AIs for the current year. Preseason AIs are used to set total allowable catch limits in the upcoming fishing season. Subsequently, postseason AIs (from the following year's calibration) are used to track catch overage and underage provisions. The first 2008 postseason AIs and the 2009 preseason AIs have now been finalized.

Table 1. Abundance Indices for 1999 to 2009 for the SEAK, NBC, and WCVI AABM fisheries.

Year	SEAK		NBC		WCVI	
	Preseason	Postseason	Preseason	Postseason	Preseason	Postseason
1999	1.15	1.12	1.12	0.97	0.60	0.50
2000	1.14	1.10	1.00	0.95	0.54	0.47
2001	1.14	1.29	1.02	1.22	0.66	0.68
2002	1.74	1.82	1.45	1.63	0.95	0.92
2003	1.79	2.17	1.48	1.90	0.85	1.10
2004	1.88	2.06	1.67	1.83	0.90	0.98
2005	2.05	1.90	1.69	1.65	0.88	0.84
2006	1.69	1.73	1.53	1.50	0.75	0.68
2007	1.60	1.34	1.35	1.10	0.67	0.57
2008	1.07	1.01	0.96	0.93	0.76	0.64
2009	1.33		1.10		0.72	

In general, the AIs for 1999 through 2001 are low compared to AIs in the late 1980s and early 1990s but values increased substantially starting in 2002. The 2009 projected AI values have declined when compared to the high values for 2003 through 2006. In 2007, declines in abundances were detected with a low in 2008. The Agreement specifies an allowable catch for each AI for each fishery. The maximum allowable Treaty catch (total catch minus any hatchery add-on and exclusion catch) by fishery and year and the actual (observed) catches are shown in Table 2. This is the first year of allowable catch under the new agreement.



Table 2. Observed catches and postseason allowable catches for 1999 to 2008, and preseason allowable catches for 1999 to 2009, for AABM fisheries.

PST Treaty Allowable and Observed Catches									
Year	SEAK (T, N, S) <sup>1</sup>			NBC (T, S)			WCVI (T, S)		
	Pre-season Allowable Catch	Post-season Allowable Catch	Observed Catch	Pre-season Allowable Catch	Post-season Allowable Catch	Observed Catch	Pre-season Allowable Catch	Post-season Allowable Catch	Observed Catch
1999	192,800	184,200	198,842	145,600	126,100	86,726	128,300	107,000	36,413
2000	189,900	178,500	186,493	130,000	123,500	31,900	115,500	86,200	101,438
2001	189,900	250,300	186,919	132,600	158,900	43,500	141,200	145,500	117,670
2002	356,500	371,900	357,133	192,700	237,800	150,137	203,200	196,800	165,036
2003	366,100	439,600	379,519	197,100	277,200	191,657	181,800	268,900	175,821
2004	383,500	418,300	417,019 421,666 <sup>2</sup>	243,600	267,000	241,508	192,500	209,600	216,624
2005	416,400	387,400	390,482	246,600	240,700	243,606	188,200	179,700	202,662
2006	346,800	354,500	357,678	223,200	200,000	215,985	160,400	145,500	146,883
2007	329,400	259,200	327,138	178,000	143,000	144,235	143,300	121,900	139,150
2008	170,000	152,800	163,685	124,800	120,900	95,647	162,600	136,900	145,726
2009	218,800			143,800			107,800		

<sup>1</sup> Nomenclature is T for troll, N for net, and S for sport.

<sup>2</sup> The lower value resulted from subtracting a disputed terminal exclusion catch for the Stikine River in 2004. Catch accounting has since been defined in the Transboundary Agreement.

Table 3 shows the differences between the postseason allowable catches and the observed catches in AABM fisheries for 1999–2008, and the cumulative differential for those years. All three AABM fisheries have cumulative underages. In SEAK, observed catches have been below final allowable catches for three of the nine years; the cumulative differential is –1.1% or –0.9%. In NBC, observed catches have been below the final allowable catches in seven of the ten years; the cumulative differential is –23.8%. In WCVI, observed catches have been below allowable catches in five of the ten years; the cumulative differential is –9.4%.

Table 3. Deviations in numbers of Chinook salmon and percentages from catch targets derived from the first postseason AI (Table 2) for Pacific Salmon Treaty AABM fisheries in 1999 to 2008.

Year	SEAK		NBC		WCVI	
	Number of Fish	Percent Difference	Number of Fish	Percent Difference	Number of Fish	Percent Difference
1999	+14,642	+7.9%	-39,374	-31.2%	-70,587	-66.0%
2000	+7,993	+4.5%	-91,600	-74.2%	+15,238	+17.7%
2001	-63,381	-25.3%	-115,400	-72.6%	-27,830	-19.1%
2002	-14,767	-4.0%	-87,663	-36.9%	-31,764	-16.1%
2003	-60,081	-13.7%	-85,543	-30.9%	-93,079	-34.6%
2004	-1,281 +3,366	-0.3% +0.8%	-25,492	-9.5%	+7,024	+3.4%
2005	+3,082	+0.8%	+2,906	+1.2%	+22,962	+12.8%
2006	+3,178	+0.9%	+15,985	+8.0%	+1,383	+1.0%
2007	+67,938	+26.2%	+1,235	+0.9%	+17,250	+14.2%
2008	+10,885	+7.1%	-25,253	-20.9%	+8,826	+6.4%
Cum.	-31,792 -27,145 <sup>1</sup>	-1.1% -0.9% <sup>1</sup>	-450,199	-23.8%	-150,577	-9.4%

<sup>1</sup> The lower value resulted from subtracting a disputed terminal exclusion catch for the Stikine River in 2004. Catch accounting has since been defined in the Transboundary Agreement.

## ISBM INDICES

For ISBM fisheries, the Agreement specified that Canada and the United States would reduce base period exploitation rates on specified stocks by 36.5% and 40%, equivalent to ISBM indices of 63.5% and 60%, respectively. This requirement is contained in Chapter 3 section 4(d) of the treaty and is referred to as the 'general obligation' and does not apply to stock groups that achieve their CTC agreed escapement goals. Estimated ISBM fishery indices are shown in Table 4 for Canadian fisheries and Table 5 for United States (U.S.) fisheries. Both tables present CWT-based indices for 2007, and Chinook model-based indices for 2009. The agreement specifies that the ISBM indices be forecasted preseason and evaluated postseason for each escapement indicator stock listed in Attachments I to V of the Chinook Chapter.

### CWT-based Indices in 2007

Five of the six Canadian ISBM indices from the Coded Wire Tag (CWT)-based estimates for 2007 show that exploitation rates were reduced more than required for all stocks or stock groups for which the indices could be calculated, with the exception being West Coast Vancouver Island. Four of the 16 U.S. ISBM indices for the CWT-based estimates for 2007 were reduced more than required. The other 12 U.S. CWT-based ISBM indices exceeded 0.60. Ten of these stocks (Upriver Brights, Quillayute, Queets, Hoh, Lewis, Mid-Columbia Summers, Nehalem, Siletz, Siuslaw and Cowichan) have agreed escapement goals. Four of these stocks (Upriver

Brights, Quillayute, Hoh, and Mid-Columbia Summers) met or exceeded their respective escapement goals, and thus are exempted from the general obligation. The only stock that didn't meet this criterion was Gray's Harbor Chinook. Figures 1.10 and 1.11 show the historical ISBM indices based on CWT recoveries for 1999-2007.

Table 4. Canadian 2007 ISBM indices based on CWT and the 2009 indices predicted from the PSC Chinook Model.

Stock Group	Escapement Indicator Stock	Canadian ISBM Indices	
		CWT Indices for 2007	Model Indices for 2009
Lower Strait of Georgia	Cowichan	0.043 <sup>4</sup>	0.495 <sup>6</sup>
	Nanaimo	NA <sup>1,5</sup>	
Fraser Late	Harrison River <sup>2</sup>	0.035 <sup>7</sup>	0.245
North Puget Sound Natural Springs	Nooksack	NA	0.988
	Skagit	NA	0.988
Upper Strait of Georgia	Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish	0.268	0.128
Fraser Early (spring and summers)	Upper Fraser, Mid Fraser, Thompson	NA	0.094
West Coast Vancouver Island Falls	WCVI (Artlish, Burman, Kauok, Tahsis, Tashish, Marble)	0.906 <sup>9</sup>	0.137
Puget Sound Natural Summer / Falls	Skagit	NA	1.097
	Stillaguamish	0.192	1.123
	Snohomish	NA	1.098
	Lake Washington <sup>8</sup>	NA	0.918 <sup>8</sup>
	Green River	0.076	0.919 <sup>8</sup>
North / Central B. C.	Yakoun, Nass, Skeena, Area 8	NA	0.224
Washington Coastal Fall Naturals <sup>3</sup>	Hoko, Grays Harbor, Queets <sup>2</sup> , Hoh <sup>2</sup> , Quillayute <sup>2</sup>	NA	0.328
Columbia River Falls <sup>3</sup>	Upriver Brights <sup>2</sup>	NA	0.517
	Deschutes	NA	0.517
	Lewis <sup>2</sup>	NA	0.832
Columbia R Summers <sup>3</sup>	Mid-Columbia Summers <sup>2</sup>	NA	0.285
Far North Migrating OR Coastal Falls <sup>3</sup>	Nehalem <sup>2</sup> , Siletz <sup>2</sup> , Siuslaw <sup>2</sup>	NA	0.543

<sup>1</sup> Not available (NA) because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc).

<sup>2</sup> Stock or stock group with a CTC agreed escapement goal.

<sup>3</sup> Stock groups listed in Annex 4, Chapter 3, Attachment V.

<sup>4</sup> An inconsistency was discovered between the approaches used to calculate the model-based and CWT-based indices. The former included harvest rates for terminal sport while the latter did not. Terminal sport harvest rates are now included in the calculation of both indices. Further review is yet required to determine whether the base period terminal sport harvest rates obtained from analyses of Big Qualicum CWT recoveries adequately represent impacts that would have occurred on Cowichan Chinook.

<sup>5</sup> Several problems have been identified in the approach previously used to calculate the CWT-based indices for Nanaimo Chinook. Until these problems are resolved, indices for this stock will not be reported.

<sup>6</sup> Although model-based indices were previously calculated separately for Cowichan and Nanaimo, these did not adequately represent impacts on either LGS stock because the model-based data represent an aggregate of the two

stocks and methods do not currently exist to correctly disaggregate these data for calculation of the ISBM values. Until such methods are developed, a single index value only will be reported representing the aggregate.

<sup>7</sup> The terminal sport harvest rates for Chilliwack Hatchery Chinook, the indicator stock, were removed from the calculation for the Harrison River naturals because sport harvest has been essentially zero on the natural population.

<sup>8</sup> For Canadian ISBM fisheries, the same distribution and Index value are used for Lake Washington and Green R.

<sup>9</sup> ISBM indices for WCVI naturals are based on information from Robertson Cr. hatchery stock, including terminal harvest rates. Prior to this report, harvest rates for terminal net and sport fisheries were treated as equal between the naturals and the hatchery indicator. However, this ignored the fact that since 1999, there has been no terminal net harvest of the vast majority of natural stocks on WCVI. Consequently, indices for WCVI naturals were adjusted to reflect this zero terminal net harvest rate. In addition, some inconsistencies were noted in the treatment of terminal harvest rates between the model and CWT indices for this stock group. These inconsistencies were eliminated.

### **Predicted ISBM Indices for 2009**

Eight of the 19 ISBM indices for Canada, based on outputs from calibration 0907, are predicted to exceed the allowable value of 0.635 for Canadian ISBM fisheries in 2009 (Table 4). Seven of these eight stocks are Puget Sound Natural Summer/Fall stocks, and do not have CTC-accepted escapement goals. One of the eight stocks, the Lewis River, has a CTC escapement goal, but was below goal in 2008.

Eight of the 22 U.S. ISBM indices based on calibration 0907 are predicted to be above the allowable limit of 0.60 for U.S. ISBM fisheries in 2009 (Table 5). Seven of the eight have CTC agreed escapement goals: Hoh, Quillayute, Upriver Brights, Mid-Columbia Summers, Nehalem, Siletz, and Siuslaw, with the exception being Lake Washington. Of the stocks with goals, four were at or above goal in 2008, and three (the Oregon stocks) were below goal in 2008.

Table 5. U.S. 2007 ISBM indices based on CWT and the 2009 indices predicted from the PSC Chinook Model.

Stock Group	Escapement Indicator Stock	U.S. ISBM Indices	
		CWT Indices for 2007	Model Indices for 2009
Washington Coastal Fall Naturals	Hoko	NA <sup>1</sup>	0.284
	Grays Harbor	0.790	0.404
	Queets <sup>2</sup>	1.050	0.508
	Hoh <sup>2</sup>	2.230	0.981
	Quillayute <sup>2</sup>	1.470	0.881
Columbia River Falls	Upriver Brights <sup>2</sup>	3.100	0.798
	Deschutes	0.510	0.461
	Lewis <sup>2</sup>	0.790	0.470
Puget Sound Natural Summer / Falls	Skagit	NA	0.292
	Stillaguamish	0.120	0.446
	Snohomish	NA	0.202
	Lake Washington	NA	0.768
	Green R	0.380	0.555
Fraser Late	Harrison River <sup>2</sup>	0.080	0.410
Columbia R Summers	Mid-Columbia Summers <sup>2</sup>	1.840	1.236
Far North Migrating OR Coastal Falls	Nehalem <sup>2,5</sup>	2.010	2.003
	Siletz <sup>2,5</sup>	1.600	1.217
	Siuslaw <sup>2,5</sup>	1.000	1.632
North Puget Sound Natural Springs	Nooksack	NA	0.107
	Skagit	NA	0.143
Lower Strait of Georgia <sup>3</sup>	Cowichan,	1.550	0.367
	Nanaimo	1.550	0.367
Upper Strait of Georgia <sup>3</sup>	Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish	NA	NC <sup>4</sup>
Fraser Early (spring and summers) <sup>3</sup>	Upper Fraser, Mid Fraser, Thompson	NA	0.156
West Coast Vancouver Island Falls <sup>3</sup>	WCVI (Artlish, Burman, Kaouk, Tahsis, Tashish, Marble)	NA	0.146
North / Central B. C. <sup>3</sup>	Yakoun, Nass, Skeena, Area 8	NA	NC <sup>4</sup>

<sup>1</sup> Not available (NA) because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc).

<sup>2</sup> Stock with a CTC agreed escapement goal.

<sup>3</sup> Stock groups listed in Annex 4, Chapter 3, Attachment IV.

<sup>4</sup> NC means that the current model assumes the stock is not caught in U.S. ISBM fisheries.

<sup>5</sup> Oregon coast stocks are based on a three year average harvest rate in in-river fisheries and are thus high. In addition Base Period harvest rates were low in terminal area fisheries.



# 1 EXPLOITATION RATE ANALYSIS AND MODEL CALIBRATION

## 1.1 INTRODUCTION

This chapter describes the methods and results of the cohort analysis, used to estimate exploitation rates from CWT data, and the PSC Chinook model calibration. The results of the 2008 preseason calibration (CLB 0907) are based on the exploitation rate analysis using CWT data through 2007, coast-wide data on catch, spawning escapements and age structure through 2008, and forecasts of Chinook returns expected in 2009. This chapter includes:

- 1) estimated postseason abundance indices for 1979 through 2008 and the preseason projection for 2009 for the AABM fisheries,
- 2) estimated non-ceiling indices, referred to as the ISBM indices in this report, for 1999 to 2007 and modeled ISBM projections for the 2009 ISBM fisheries,
- 3) estimated stock composition for 1979 through 2008 and a projection for 2009 for the AABM and other fisheries, and
- 4) estimated fishery indices (harvest rates) for the AABM fisheries.

Appendix A shows the relationship between the exploitation rate indicator stocks, model stocks, and PST Annex stocks. Appendices B to I present some additional output from the exploitation rate analysis and model calibration beyond the summaries presented in this Chapter. Appendix B provides the time series of ISBM CWT indices, and ISBM model indices from calibration 0907. Appendix C shows the percent distribution of landed catch and total mortality by catch year for exploitation rate indicator stocks. Appendix E has the time series of brood year exploitation rates for the CWT indicator stocks. Appendix F shows the model estimates of stock composition in AABM and other sport and troll fisheries. Appendix G lists the incidental mortality rates used in the CTC model. Appendix H gives the time series of total AIs for the AABM fisheries, and Appendix I provides the AIs for each model stock for each AABM fishery. Appendix J presents the time series of CWT-based fishery exploitation rate indices by stock, age, and fishery.

## 1.2 METHODS

A complete description of methods for the exploitation rate analysis and model procedure is reported in TCCHINOOK (05)-2 (CTC 2005b). The exploitation rate assessment is performed through cohort analysis of CWT release and recovery data (CTC 1988). Cohort analysis is the reconstruction of the exploitation history of a given stock and brood year and is used to produce a variety of statistics, including total exploitation rates, age and fishery specific exploitation rates, maturation rates, pre-age 2 recruitment survival indices (Appendix D), and annual distribution of fishery-related mortalities.

Estimates of age and fishery-specific exploitation and maturation rates from the cohort analysis are combined with data on catches, escapements, non-retention, and enhancement to complete the annual calibration of the CTC Model. The calibration procedure estimates pre-age 2 survival to recruitment for the stocks included in the model.

Results from the annual preseason calibration of the Chinook model are used to calculate: 1) AIs for the three AABM fisheries; 2) postseason AIs for the previous year; and 3) preseason and

postseason ISBM indices. Projected AIs for 2009 are used to determine the allowable 2009 catch of Treaty Chinook for AABM fisheries. Postseason AIs are used to appraise the season's allowable catches and to evaluate compliance for AABM fisheries. For the ISBM fisheries, the Agreement specifies that Canada and the United States will reduce the exploitation rate from the 1979–1982 base period by 36.5% and 40.0%, respectively, on stocks that have not achieved their CTC agreed escapement goals. The ISBM index is used to estimate the annual reduction in exploitation rates relative to the base period. Postseason ISBM indices for 2008 are computed using results of the exploitation rate analysis. Forecasts of the 2009 ISBM indices are computed using the CTC model. The Agreement specifies that the postseason ISBM indices estimated through exploitation rate analysis of CWT recoveries will be used to assess the ISBM index.

### **1.3 CHANGES IN THE 2009 CHINOOK MODEL CALIBRATION (#0907) FROM 2008**

1. **BSE, STK, PNV and IM files:** No changes were made.
2. **FCS File (Escapements, terminal runs and agency forecasts)**

For stocks with forecasts, the 2008 agency forecasts were updated with actual return numbers and 2009 agency forecasts were added. For stocks without forecasts, the 2008 terminal runs or escapements were added.

**WSH:** Changes were made to rectify errors in reporting of the age-structured terminal run dating back to 2007. The specific error made was that instead of reporting the age specific terminal run estimates for ages 4, 5 and 6 (as had been done prior to 2007), the FCS file contained terminal run information for age 3, ages 4, and age 5 and 6's combined. The model was not able to reconcile the maturation rate data for WSH with the reported age structure of the terminal run in the FCS file. This resulted in inflation of the 2005 EV scalar and a poor fitting of the 2007 and 2008 model estimates of terminal run by age to the calibration data. The WSH data in the FCS file was reviewed and the errors corrected back to 2007, including the observed data for 2008 and the forecast for 2009.

**ORC:** Changes were made to the age specific escapements for the NOC Oregon coastal aggregate dating back to 2004. Age structure for the Oregon Coast escapement estimates for 2004 and 2005 had been apportioned through long-term averages, instead of year specific observational data. Observations of age-structured escapement within each escapement year were applied to the escapement data in this year's model calibration. A deficiency in the escapement sampling in the NOC aggregate for the 2006 return year was noted. Specifically, estimates of 3-year old escapement were biased extremely low for the aggregate. Only two 3-year old fish were observed in the series of "standard" surveys traditionally used to generate both estimates of escapement and age-structure for the year's return. Fortunately, in 2006 mark-recapture studies were conducted concurrently in two of the aggregate's three escapement indicator basins; the Siletz and Siuslaw. The average age-structure data between these studies was independently applied to the overall aggregate's escapement estimate. While this method differs from the method used to apportion the age specific escapement for the ORC stock in all other return years in the FCS file, analysts believe this method provides for a better, more

defensible estimate of the overall age structure for the escapement of the NOC aggregate in 2006.

**WCH and WCN:** Analysts noted that both WCN and WCH stocks in the \*.FCS file differed from the terminal data used by WDFW and co-managers and reported in PFMC post-season ocean reviews. Hence, in order to make all three data sources match up, the terminal run data from the FP spreadsheet (wcntfp09.xls) were used to update data for the WCH stock from 1990 through 2008 and for the WCN stock from 1991 through 2008.

**SNO:** The 2005 and 2006 terminal run data was updated.

**CWS:** The 2002-2008 terminal run data was updated.

**SKG, URB, SPR, BON, CWF and MCB:** The 2007 terminal run data was updated.

### **3. CNR File (Chinook non-retention data)**

Unless a fishery is specifically mentioned below, no CNR was reported in that fishery in 2008.

**SEAK Troll:** External estimates of CNR encounters and associated landed catch values (CNR method 2) were updated from 2004-2007 and 2008 data was added.

**North Troll:** External estimates of CNR encounters (CNR method 2) were updated for 2002 and 2005-2007. The 2003 CNR effort data (CNR method 1) was replaced with external estimates of CNR encounters and 2008 encounter estimates were added.

**Central Troll:** 2008 external estimates of CNR encounters (CNR method 2) were added.

**WCVI Troll:** The 2006 external estimates of CNR encounters (CNR method 2) were updated. The 2007 external estimate of encounters was changed to no CNR (CNR method 0) in 2007. No CNR was reported in 2008.

**GS Troll:** The 1985 landed catch associated with the external estimate of encounters (CNR method 2) was updated. No CNR was reported in 2008.

**SEAK Net:** The 1994, 1998, 1999 and 2007 external estimates of CNR encounters and the associated landed catch values (CNR method 2) were updated. The 2005 and 2006 CNR encounter estimates were changed to no CNR (CNR method 0). The yearly CNR encounter estimates are estimated from a regression based on landed catch. However, there were no CNR periods in the SEAK net fishery in 2005 and 2006 so the regression estimates should not have been applied in 2005 and 2006.

**North Net:** 2008 CNR effort data (CNR method 1) was added.

**WCVI Net:** 2006 CNR effort data (CNR method 1) was updated. No CNR was reported in 2008.



**Juan de Fuca Net:** The 2007 external estimates of CNR encounters (CNR method 2) were updated. CNR effort estimates (CNR method 1) were added for 2008.

**Johnstone Strait Net:** The 2006 CNR effort estimates (CNR method 1) were updated. The 2007 CNR effort estimates were replaced with external estimates of CNR encounters (CNR method 2). CNR effort estimates for 2008 (CNR method 1) were added.

**North/Central (QCI) Sport:** The 1995 and 1997-2005 CNR effort estimates (CNR method 1) were updated. The 2006 and 2007 external estimates of CNR encounters (CNR method 2) were replaced with CNR effort estimates (CNR method 1). In addition, the legal selectivity factor was changed from 0.34 to 1. This was done because CNR method 1 (the ratio of CNR effort to retention effort) is being used to estimate the number of legal sized releases in this fishery during the retention fishery. The estimates of the number of legal-sized releases from certain areas of the QCI sport fishery are being used in place of the CNR effort and the landed catch estimates in these areas are being used in place of the retention effort. The resulting ratio of legal sized releases to landed catch is then used to estimate the legal sized releases for the entire fishery. The legal selectivity factor was set to 1 since the encounters are happening during the retention fishery when legal Chinook are being targeted. There is no need to discount the release estimates due to targeting of other species or fishing in areas of reduced Chinook abundance as expected during a true non-retention fishery. In addition, the sublegal selectivity factor was changed from 1 to 0 since the sublegal releases are occurring during the retention fishery and are already being accounted for in the estimated number of shakers. If the sublegal selectivity were left at 1 then there would be a double accounting for the sublegal releases. In addition, estimates of legal sized releases and landed catch (CNR method 1) were added for 2008.

**WCVI Sport:** The same method for estimating legal sized releases that was described in the narrative for the QCI sport fishery was used in the WCVI sport fishery as well: In order to estimate the number of legal size releases in the WCVI sport fishery, the 2001-2007 external estimates of CNR encounters (CNR method 2) were replaced with CNR method 1. External estimates of encounters and landed catch were used in place of CNR effort and retention effort respectively. The legal selectivity factor was changed from 0.34 to 1 and the sublegal selectivity factor was changed from 1 to 0 for the same reasons that were described in the narrative for QCI sport. In addition, estimates of legal sized releases and landed catch (CNR method 1) were added for 2008.

**Puget Sound North Sport and Puget Sound South Sport:** The 2007 estimates of CNR angler trips and retention angler trips (CNR method 1) were updated and the updated 2007 values were also used as the estimated data for 2008.

**Strait of Georgia Sport:** The 2000-2007 external estimates of CNR encounters (CNR method 2) for the Strait of Georgia (GS) sport fishery were changed to no CNR encounters (CNR method 0). This fishery is actually a combination of GS sport and Canadian Juan de Fuca sport. The GS sport has a 62 cm size limit and the Juan de Fuca sport has a 45 cm size limit. This means that some sublegal fish that are released in GS sport are above the legal size limit in Juan de Fuca sport. It is unclear what data could be provided that would generate appropriate legal and sublegal estimates of CNR encounters. In addition, the pseudo-CNR encounter estimates that had been reported for 2000-2007 could not be replicated. Therefore, the decision was made to

remove the pseudo-CNR data that had been reported for these years. There is recognition that a review and discussion of this issue by the AWG and Model Improvement Workgroup is needed.

#### **4. CEI File (Ceiling File)**

The only change to fisheries in the ceiling file that are not specifically referenced below is the addition of the 2008 fishery catch.

**SEAK Troll, SEAK Net and SEAK Sport:** The 2003-2007 treaty catches were updated and the 2008 treaty catches were added.

**North/Central (QCI) Sport and WCVI Sport:** The 2007 catch was updated and the 2008 catch was added.

**WA/OR Troll:** The 1989-2007 catches were updated and the 2008 catch was added.

**WA/OR Sport:** The 1996-2007 catches were updated and the 2008 catch was added.

**Puget Sound North Sport and Puget Sound South Sport:** The 2004-2007 catches were updated and the 2008 catches were added.

#### **5. FPA (FP) and ST2 (Stage 2 Calibration) Files**

**Fisheries with terminal Fishery Policy (FP) spreadsheets:** The terminal FP spreadsheets for South Puget Sound Net, Washington Coastal Net, Columbia River Net, Fraser Net and Columbia River Sport were updated with catch and escapement data through 2008 to create FPA files with FP data through 2008. FP projections were made for 2009 based on a three year average from 2006-2008.

**Fisheries without terminal FP spreadsheets:** All fisheries without a terminal FP spreadsheet are in the CEI file. For all stocks not specifically referenced in an FPA file, FP changes were made to the pre-ceiling years of 1983 and 1984 using the updated FI values from the latest Exploitation Rate Analysis (ERA). Any stocks that were specifically mentioned in the FPA files had their FP data updated through 2007, the most recent year in the ERA.

**SEAK Troll:** The FP spreadsheet was updated using the recently completed ERA results through 2007. The SEAK troll FP spreadsheet combines the stock and age specific base period exploitation rates in the six SEAK troll SPFI strata with the yearly strata specific FI values to create year, stock and age specific FP values for the fishery. Any stocks that were not specifically mentioned in the FPA file had their FP data updated using the SEAK SPFI values through 2007. The six SPFI strata are Winter/Spring, June Inside, June Outside, July Inside, July Outside and Fall.

The stage 2 calibration used the "recent" year (variable among fisheries and stocks) FPxRT averages through 2008 to compute 2009 and 2010 FP values. The new 2009 and 2010 FP values replaced the FP values in the stage 1 FPA files and a new stage 2 FP file was created that contained FP data for all fisheries, stocks and ages. All fisheries with terminal FP spreadsheets

had updated FP data through 2008 and all fisheries without terminal FP spreadsheets were in the CEI file and had catch estimates through 2008. Therefore, the model computed RT data for these fisheries through 2008. Hence, all fisheries had either updated FP data and/or RT values through 2008. The stage 2 FP file was used in both the stage 2 calibration and the projection run to try to more accurately represent the fishery, stock, and age specific impacts in the projection years of 2009 and 2010. Use of the FPxRT averages for the projection years helps to produce more realistic catch estimates for specific stocks in the fisheries and also produces more realistic terminal runs sizes.

**IDL (Interdam Loss) File:** Columbia River stocks had their interdam loss factors updated through 2008. 2009 was projected based on short term (3 year) averages.

**MATAEQ (Maturation and Adult Equivalence) File:** The 12 stocks in the MATAEQ file (AKS, BON, CWF, GSH, LRW, ORC, RBH, RBT, SPR, URB, WSH and FRL) had their age specific maturation rate and AEQ estimates updated through 2007 using stock and age specific estimates from the most recent ERA. Values from missing broods and projection years used long-term average maturation rate and AEQ estimates by stock and age. In some instances, stock specific maturation and AEQ data from broods that were not technically missing were treated as though they were missing if the information was deemed to be suspect. A summary of these changes is presented in Table 1.1 Modifications to the maturation rate and AEQ data in the MATAEQ file.

STOCK		BROOD	PROBLEM/ISSUE	RESOLUTION	EFFECT
ERA	MODEL				
LRH	BON	1977	Age 2 maturation rate equals 0	Set brood year to invalid	MATAEQ file uses long-term maturation rates
LRH	BON	1980	No age 5 recoveries	Set brood year to invalid	MATAEQ file uses long-term maturation rates
			Age 4 maturation rate < age 3 maturation rate		
LRH	BON	1983	Age 2 maturation rate equals 0,	Set brood year to invalid	MATAEQ file uses long-term maturation rates
LRH	BON	1986	No age 5 recoveries	Set brood year to invalid	MATAEQ file uses long-term maturation rates
LRH	BON	1987	No age 5 recoveries	No change	
LRH	BON	1988	No age 5 recoveries	Set brood year to invalid	MATAEQ file uses long-term maturation rates
LRH	BON	1990	No age 5 recoveries	Set brood year to invalid	MATAEQ file uses long-term maturation rates
			Age 2 maturation rate equals 0,		
LRH	BON	1991	No age 5 recoveries	Set brood year to invalid	MATAEQ file uses long-term maturation rates
			Age 4 maturation rate < age 3 maturation rate		
LRH	BON	1992	No age 5 recoveries	Set brood year to invalid	MATAEQ file uses long-term maturation rates
LRH	BON	1993	No age 5 recoveries	Set brood year to invalid	MATAEQ file uses long-term maturation rates
LRH	BON	1994	No age 5 recoveries	Set brood year to invalid	MATAEQ file uses long-term maturation rates
LRH	BON	1995	No age 5 recoveries	No change	
LRH	BON	1996	No age 5 recoveries	Set brood year to invalid	MATAEQ file uses long-term maturation rates
CWF	CWF	1994	Age 2 maturation rate equals 0	Set brood year to invalid	MATAEQ file uses long-term maturation rates
CWF	CWF	1997	No age 5 recoveries	Set brood year to invalid	MATAEQ file uses long-term maturation rates
			No age 5 recoveries, Poor brood survival		
BQR	GSH	1992	Age 2 maturation rate equals 0	Set brood year to invalid	MATAEQ file uses long-term maturation rates
LRW	LRW	1996	Age 2 maturation rate equals 0	Set brood year to invalid	MATAEQ file uses long-term maturation rates
LRW	LRW	1997	Age 2 maturation rate equals 0	Set brood year to invalid	MATAEQ file uses long-term maturation rates
RBT	RBT,RBH	1992	Age 2 maturation rate equals 0	Set brood year to invalid	MATAEQ file uses long-term maturation rates
RBT	RBT,RBH	1997	Age 2 maturation rate equals 0	Set brood year to invalid	MATAEQ file uses long-term maturation rates
SPR	SPR	1979	No age 5 recoveries	No change	
SPR	SPR	1983	No age 5 recoveries	No change	
SPR	SPR	1984	No age 5 recoveries	No change	
SPR	SPR	1992	No age 5 recoveries	No change	
SPR	SPR	1994	No age 5 recoveries	No change	
WSH	WSH	1982	Age 2 maturation rate equals 0	Set brood year to invalid	MATAEQ file uses long-term maturation rates
WSH	WSH	1994	No age 6 recoveries	Set brood year to invalid	MATAEQ file uses long-term maturation rates

The highlighted stock and brood specific changes were also made to the 2007 and 2008 model calibrations.

## **1.4 EXPLOITATION RATE ASSESSMENT (THROUGH CALENDAR YEAR 2008)**

The CTC currently monitors 43 exploitation rate indicator stocks that are coded-wire tagged, but only 40 were used for analyses in this chapter (Table 1.1). The historic time series was expanded for: Nanaimo, Nicola, Dome, and Lower Shuswap. An exploitation rate indicator stock is not used in the exploitation rate analysis if the number of CWT recoveries is very limited (minimum of 35 estimated recoveries for a given stock and age combination) or there is no quantitative estimate of tags in the spawning escapement (see footnotes in Table 1.2). Indicator stocks used for exploitation rate analysis and the type of analysis performed for each are shown in Table 1.2. The relationship between the exploitation rate indicator stocks, model stocks, and PST Annex stocks are shown in Appendix A. Extrapolation of results to similar stocks and/or generalizations about fishery impacts will only be appropriate to the extent that the exploitation rate indicator stocks are representative of the stock groups they are intended to represent.



Table 1.1. Exploitation rate indicator and DIT stocks, their location, run type, and smolt age.

Stock/Area	Exploitation Rate Indicator Stocks	Hatchery	Run Type	Age
Southeast Alaska	Alaska Spring	Crystal Lake, Whitman Lake, Little Port Walter, Deer Mountain, Neets Bay	Spring	Age 1
North/Central BC	Kitsumkalum	Terrace	Summer	Age 1
WCVI	Robertson Creek	Robertson Cr	Fall	Age 0
Strait of Georgia	Quinsam	Quinsam	Fall	Age 0
	Puntledge	Puntledge	Summer	Age 0
	Big Qualicum	Big Qualicum	Fall	Age 0
	Cowichan	Cowichan	Fall	Age 0
	Nanaimo	Nanaimo	Fall	Age 0
Fraser River	Chilliwack (Harrison Stock) <sup>1</sup>	Chilliwack	Fall	Age 0
	Lower Shuswap	Shuswap Falls	Summer	Age 0
	Nicola	Spius Creek	Spring	Age 1
	Dome	Penny Creek	Spring	Age 1
North Puget Sound	Skagit Spring Fingerling	Marblemount	Spring	Age 0
	Skagit Spring Yearling <sup>1</sup>	Marblemount	Spring	Age 1
	Skagit Summer Fingerling	Marblemount	Summer	Age 0
	Nooksack Spring Fingerling	Kendall Cr	Spring	Age 0
	Nooksack Spring Yearling	Kendall Cr	Spring	Age 1
	Samish Fall Fingerling <sup>1</sup>	Samish	Summer/Fall	Age 0
Central Puget Sound	Stillaguamish Summer Fingerling	Stillaguamish Tribal	Summer/Fall	Age 0
	South Puget Sound Fall Fingerling <sup>1</sup>	Soos Cr / Grovers Cr	Summer/Fall	Age 0
	Univ of Washington Accelerated	UW	Summer/Fall	Age 0
South Puget Sound	South Puget Sound Fall Yearling	Turnwater Falls	Summer/Fall	Age 1
	White River Spring Yearling <sup>2</sup>	White R	Spring	Age 1
	Nisqually Fall Fingerling <sup>1</sup>	Clear Cr	Summer/Fall	Age 0
Hood Canal	George Adams Fall Fingerling <sup>1</sup>	George Adams	Summer/Fall	Age 0
Juan de Fuca	Elwha Fall Fingerling	Lower Elwha	Summer/Fall	Age 0
	Hoko Fall Fingerling	Hoko	Summer/Fall	Age 0
North Wash Coast	Soocs Fall Fingerling	Makah NFH	Fall	Age 0
Willamette R	Queets Fall Fingerling (wild brood)	Salmon R (WA)	Fall	Age 0
	Willamette Spring <sup>1</sup>	Willamette H	Spring	Age 1
Lower Columbia R	Cowlitz Tule (WA)	Cowlitz	Fall Tule	Age 0
	Spring Creek Tule (WA) <sup>1</sup>	Spring Cr NFH	Fall Tule	Age 0
	Columbia Lower River Hatchery <sup>1</sup>	Big Creek	Fall Tule	Age 0
	Lewis River Wild	Wild	Fall Bright	Age 0
Upper Columbia R	Columbia Summers (WA)	Wells	Summer	Age 1
	Columbia Upriver Bright	Priest Rapids	Fall Bright	Age 0
	Hanford Wild	Wild	Fall Bright	Age 0
Snake River	Lyons Ferry <sup>3,1</sup>	Lyons Ferry	Fall Bright	Age 0
North Oregon Coast	Salmon River	Salmon R	Fall	Age 0
Mid Oregon Coast	Elk River	Elk R	Fall	Age 0

<sup>1</sup> DIT tags associated with this stock

<sup>2</sup> No longer adipose fin clipped

<sup>3</sup> Sub-yearlings have been CWT-tagged since brood year 1986, except for brood years 1993 through 1997

Table 1.2. The 40 CWT exploitation rate indicator stocks used in the exploitation rate analysis and the data derived from them: fishery, ISBM and survival indices, brood exploitation rates (Brood Exp), and stock catch distribution (Dist) with quantitative escapement estimates (Esc) and tagging during the base period years 1979–1982.

Exploitation Rate Indicator Stocks	Fishery Index	ISBM Index	Brood <sup>1</sup> Exp	Survival Index	Dist	Esc	Base Tagging
Alaska Spring	yes	—	Total	yes	yes	yes	yes
Kitsumkalum	—	—	Total	yes	yes	yes	—
Robertson Creek	yes	yes	Ocean <sup>1</sup>	yes	yes	yes	yes
Quinsam	yes	yes	Total	yes	yes	yes	yes
Puntledge	yes	—	Total	yes	yes	yes	yes
Big Qualicum	yes	yes	Total	yes	yes	yes	yes
Nanaimo	—	yes	Total	yes	yes	yes	yes
Dome	—	—	Total	—	yes	yes	—
Lower Shuswap	—	—	Total	—	yes	yes	yes
Nicola	—	—	Total	—	yes	yes	—
Cowichan	yes	yes	Total	yes	yes	yes	—
Chilliwack (Harrison Fall Stock)	—	yes	Total	yes	yes	yes	—
Nooksack Spring Fingerling	—	—	<sup>4</sup>	—	yes	yes	—
Nooksack Spring Yearling	—	yes	<sup>4</sup>	yes	yes	yes <sup>3</sup>	—
Skagit Spring Fingerling	—	—	Ocean	—	yes	yes	—
Skagit Spring Yearling	—	—	Ocean	yes	yes	yes <sup>3</sup>	—
Samish Fall Fingerling	yes	—	Ocean	yes	yes	yes <sup>3</sup>	yes
Skagit Summer Fingerling	—	—	Ocean	—	yes	yes	—
Stillaguamish Summer Fingerling	—	yes	<sup>4</sup>	—	yes	—	—
Nisqually Fall Fingerling	—	—	<sup>4</sup>	—	yes	—	yes
University of Washington Accelerated	yes	<sup>2</sup>	<sup>2</sup>	—	yes	yes <sup>3</sup>	yes
George Adams Fall Fingerling	yes	<sup>2</sup>	<sup>2</sup>	yes	yes	yes <sup>3</sup>	yes
South Puget Sound Fall Fingerling	yes	yes	Ocean	yes	yes	yes <sup>3</sup>	yes
South Puget Sound Fall Yearling	yes	<sup>2</sup>	<sup>2</sup>	yes	yes	yes <sup>3</sup>	yes
Squaxin Pens Fall Yearling	—	<sup>2</sup>	<sup>2</sup>	yes	yes	yes <sup>3</sup>	—
White River Spring Yearling	—	—	<sup>4</sup>	yes	yes	yes <sup>3</sup>	yes
Elwha Fall Fingerling	—	—	<sup>4</sup>	yes	yes	—	—
Hoko Fall Fingerling	—	—	Ocean	yes	yes	yes	—
Sooes Fall Fingerling	—	—	Ocean	yes	yes	yes	—
Queets Fall Fingerling	—	yes	<sup>4</sup>	yes	yes	—	yes
Willamette Spring	yes	—	Ocean	yes	yes	yes	yes
Columbia Summers	yes	yes	Total	yes	yes	yes	—
Cowlitz Tule	yes	—	Ocean	yes	yes	yes	yes
Spring Creek Tule	yes	—	<sup>2</sup>	yes	yes	yes	—
Columbia Lower River Hatchery	yes	—	<sup>2</sup>	yes	yes	yes	yes
Upriver Bright	yes	yes	Total	yes	yes	yes	yes
Hanford Wild	—	—	Total	yes	yes	yes	—
Lyons Ferry	—	—	Total	yes	yes	yes	—
Lewis River Wild	yes	yes	Total	yes	yes	yes	yes
Salmon River	yes	yes	Ocean	yes	yes	yes	yes

<sup>1</sup> For stocks of hatchery origin and subject to terminal fisheries directed at harvesting surplus hatchery production, ocean fisheries do not include terminal net fisheries. Otherwise, total fishery includes terminal net fisheries

<sup>2</sup> Hatchery stock not used to represent naturally spawning stock

<sup>3</sup> Only hatchery rack recoveries are included in escapement

<sup>4</sup> Insufficient escapement data for exploitation rate analysis

## 1.5 MODEL OUTPUT

### 1.5.1 AABM Abundance Indices and Associated Catches

Beginning with the 1999 fishing season, the Agreement specified that the AABM fisheries are to be managed through the use of the preseason AIs, where specific allowable harvest corresponds to a given AI for each fishery. The preseason AIs that were used to establish harvest management targets are listed in Table 1.3. The 2009 preseason AI for the SEAK troll fishery is 1.33, for the NBC troll fishery it is 1.10, and for the WCVI troll fishery is 0.72. This is the first year of the new annex to the Pacific Salmon treaty that adjusts for a drop in catches and associated harvest rates in Southeast Alaska, and West Coast of Vancouver island AABM fisheries in response to conservation concerns coastwide. The NBC AABM fishery remained at the same allowable catch and harvest rates as the previous annex. In-season predictors may also be used for in-season adjustments to the preseason AI's for the SEAK troll fishery. However, the in-season AI has not provided a reliable estimate of the postseason AI due to its reliance on the preseason AI in the calculations and has not been used for in-season management action since 2001.

The postseason AI is considered a more accurate estimate of the abundance index for the AABM fisheries, and is used to compute a final allowable catch for each fishery to evaluate overage or underage of the landed catch relative to the harvest objective. Postseason AIs for 1999-2008 are also listed in Table 1.3.

Table 1.3. Abundance indices for 1999 to 2009 for the SEAK, NBC, and WCVI troll fisheries.

Year	Calibration	SEAK			NBC		WCVI	
	Preseason/ Postseason	Preseason	Inseason	Postseason	Preseason	Postseason	Preseason	Postseason
1999	9902 / 0107	1.15	1.15	1.12	1.12	0.97	0.60	0.50
2000	0021 / 0107	1.14	1.14	1.10	1.00	0.95	0.54	0.47
2001	0107 / 0206	1.14	1.10	1.29	1.02	1.22	0.66	0.68
2002	0206 / 0308	1.74	1.73	1.82	1.45	1.63	0.95	0.92
2003	0308 / 0404	1.79	1.76	2.17	1.48	1.90	0.85	1.10
2004	0404 / 0506	1.88	1.88	2.06	1.67	1.83	0.90	0.98
2005	0506 / 0604	2.05	2.04	1.90	1.69	1.65	0.88	0.84
2006	0604 / 0705	1.69	1.69	1.73	1.53	1.50	0.75	0.68
2007	0705 / 0805	1.60		1.34	1.35	1.10	0.67	0.57
2008	0805/0907	1.07		1.01	0.96	0.93	0.76	0.64
2009	0907	1.33			1.10		0.72	

The Agreement specifies the allowable catch for various values of the AI for each fishery. Catches for 1999-2008 were from Table 1 in the Chinook Annex to the 1999 Agreement. In the 2009 Agreement, the relationship between the AI and the allowable catch changed for SEAK and WCVI; thus the allowable catches for 2009 were derived from Table 1 of the Chinook Annex to the 2009 Agreement. The allowable treaty catch by fishery and year based on pre- and



postseason AIs and the actual (observed) catches are given in Table 1.4 and are shown in Figures 1.1 through 1.6; the solid line represents the relationship between AIs and allowable catch under Table 1 of the annex.

Table 1.4. Observed catches and postseason allowable catches for 1999 to 2008, and preseason allowable catches for 1999 to 2009, for AABM fisheries.

Year	PST Treaty Allowable and Observed Catches								
	SEAK (T, N, S) <sup>1</sup>			NBC (T, S)			WCVI (T, S)		
	Pre-season Allowable Catch	Post-season Allowable Catch	Observed Catch	Pre-season Allowable Catch	Post-season Allowable Catch	Observed Catch	Pre-season Allowable Catch	Post-season Allowable Catch	Observed Catch
1999	192,800	184,200	198,842	145,600	126,100	86,726	128,300	107,000	36,413
2000	189,900	178,500	186,493	130,000	123,500	31,900	115,500	86,200	101,438
2001	189,900	250,300	186,919	132,600	158,900	43,500	141,200	145,500	117,670
2002	356,500	371,900	357,133	192,700	237,800	150,137	203,200	196,800	165,036
2003	366,100	439,600	380,152	197,100	277,200	191,657	181,800	268,900	175,821
2004	383,500	418,300	428,773 433,446 <sup>2</sup>	243,600	267,000	241,508	192,500	209,600	216,624
2005	416,400	387,400	391,507	246,600	240,700	243,606	188,200	179,700	202,662
2006	346,800	354,500	359,184	223,200	200,000	215,985	160,400	145,500	146,883
2007	329,400	259,200	321,537	178,000	143,000	144,235	143,300	121,900	139,150
2008	170,000	152,800	163,685	124,800	120,900	95,647	162,600	136,900	145,726
2009	218,800			143,000			107,800		

<sup>1</sup> Nomenclature is T for troll, N for net, and S for sport.

<sup>2</sup> The lower value results from subtracting a terminal exclusion catch for the Stikine River in 2004, which is in dispute.

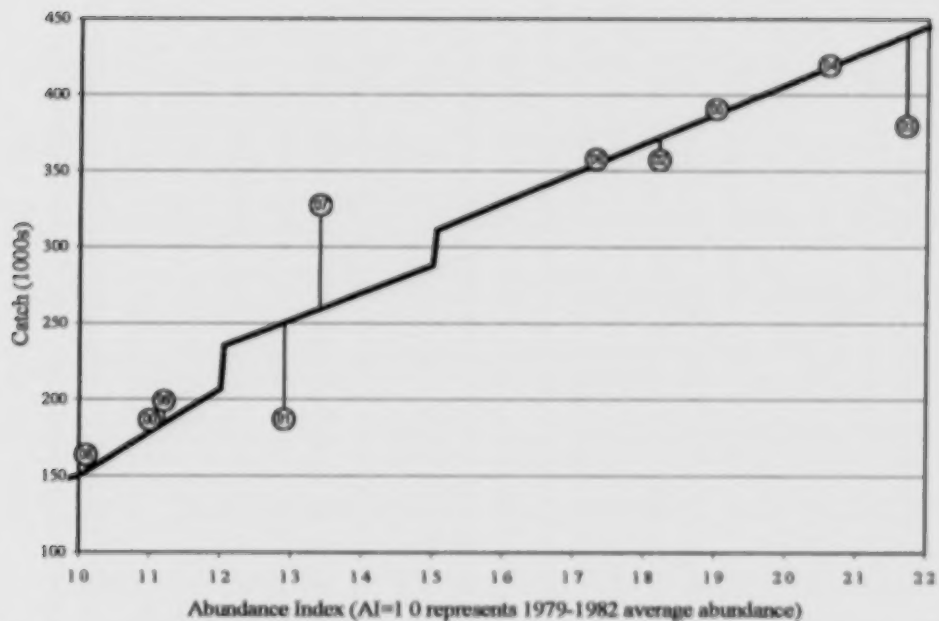


Figure 1.1. Postseason catches (open circles) versus postseason allowable catches (line) in the SEAK AABM fishery, 1999-2008.

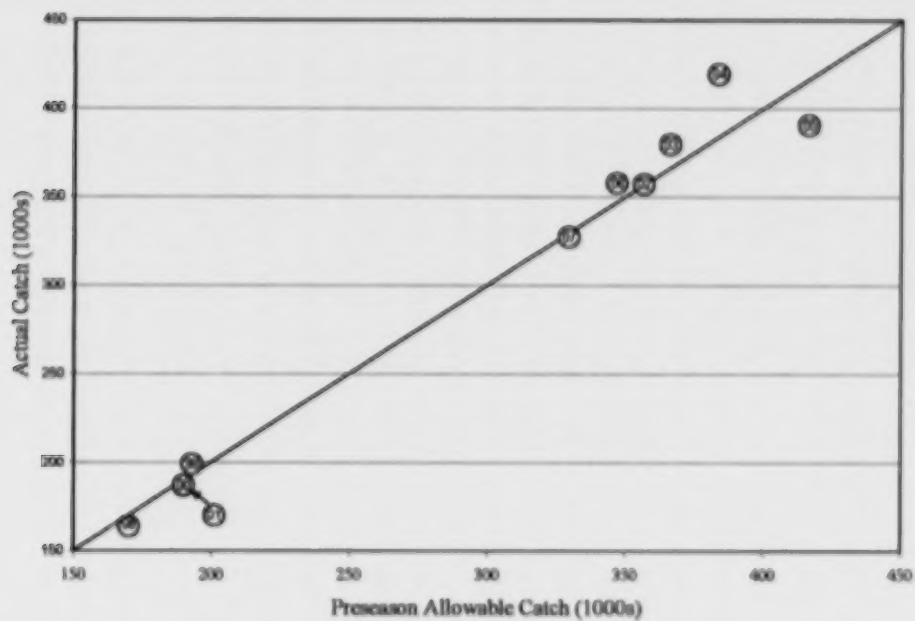


Figure 1.2. Postseason catches (open circles) versus preseason allowable catches (line) in the SEAK AABM fishery, 1999-2008.

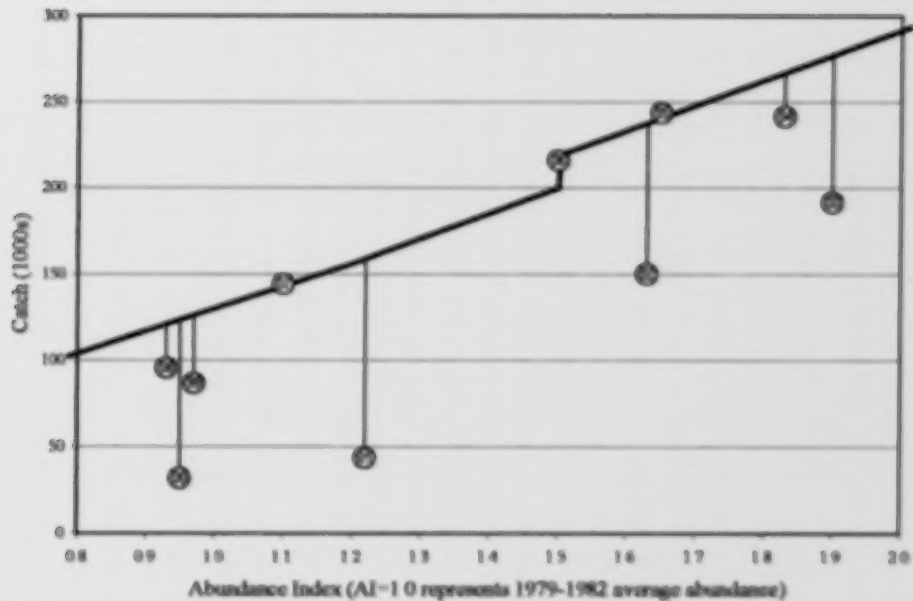


Figure 1.3. Postseason catches (open circles) versus postseason allowable catches (line) in Northern British Columbia troll and Queen Charlotte Islands recreational AABM fisheries, 1999-2008.

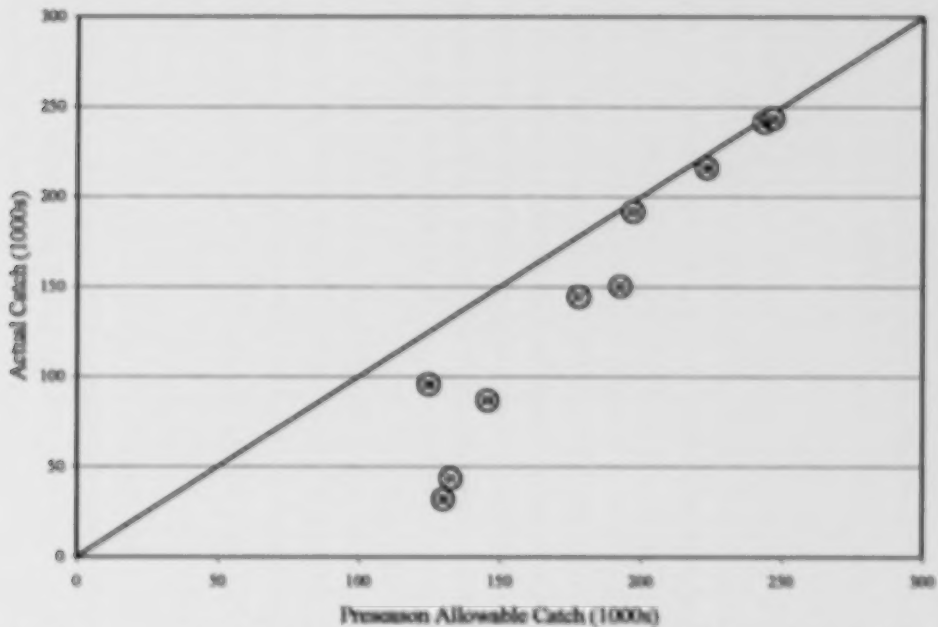


Figure 1.4. Postseason catches (open circles) versus preseason allowable catches (line) in Northern British Columbia troll and Queen Charlotte Islands recreational AABM fisheries, 1999-2008.

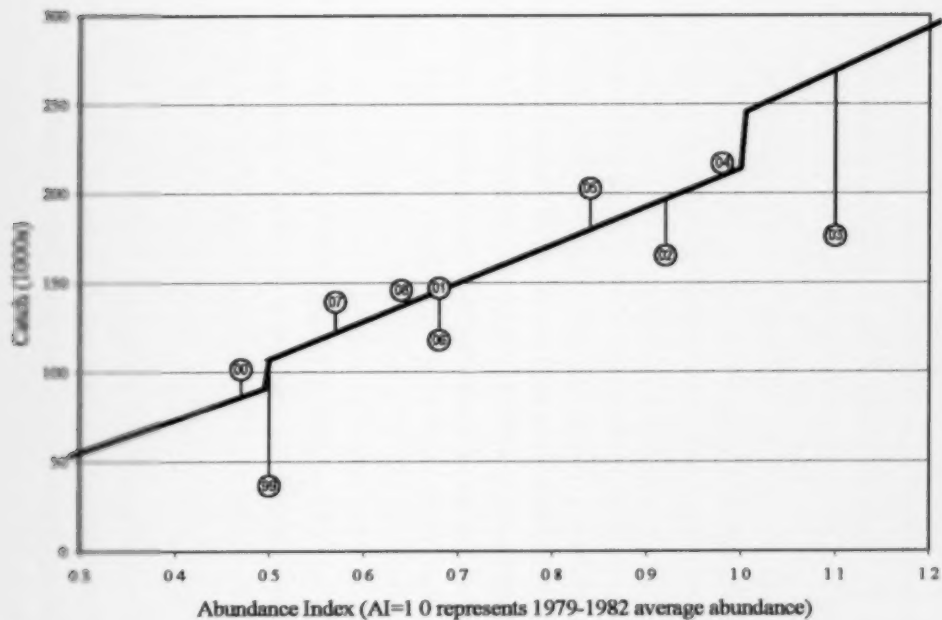


Figure 1.5. Postseason catches (open circles) versus postseason allowable catches (line) in West Coast Vancouver Island AABM fisheries, 1999-2008.

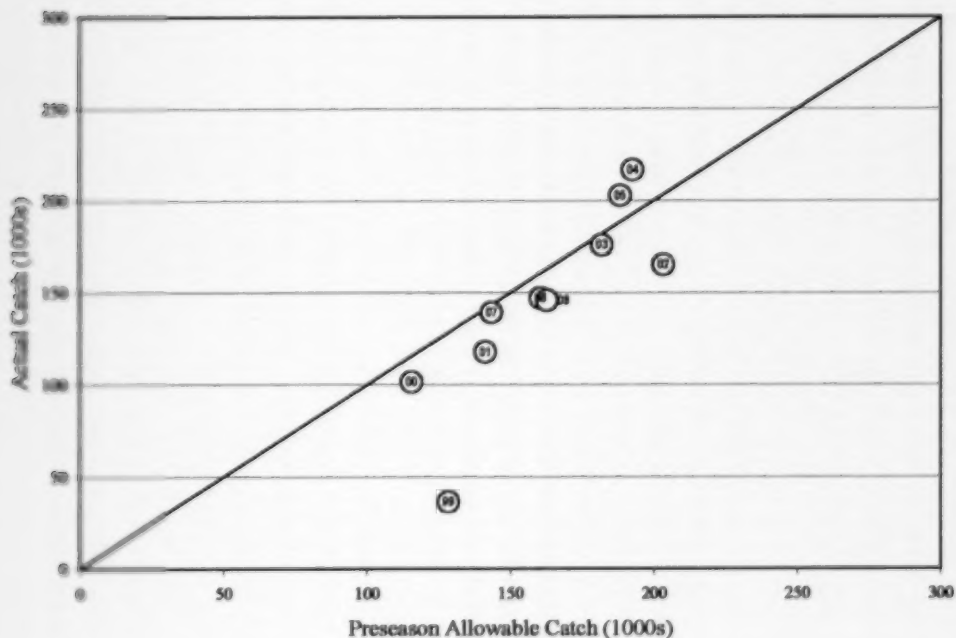


Figure 1.6. Postseason catches (open circles) versus preseason allowable catches (line) in West Coast Vancouver Island AABM fisheries, 1999-2008.

### 1.5.1.1 Model estimates of stock composition of AABM fisheries, 1979-2009

There are 30 model stocks (Appendix A). However, the majority of model catches in AABM fisheries are often composed of a few smaller set of major stocks (Figures 1.7 through 1.9). The relative abundance for each major stock is shown in those graphs from CLB 0907. In general, postseason AIs had a peak during the late 1980s (87, 88, & 89) and another in 2003 and 2004.

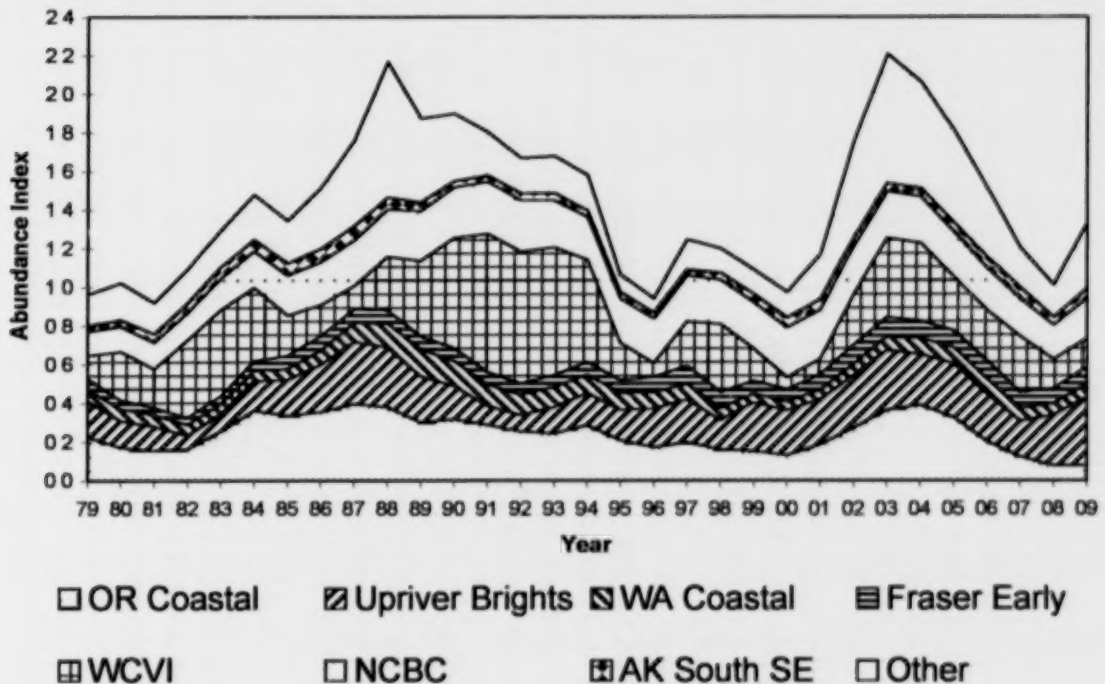


Figure 1.7. Total abundance indices for the SEAK troll fishery with annual stock composition indicated by abundance indices for major model stocks from CLB 0907.

The major model stocks contributing to the SEAK AIs are: WCVI Natural and Hatchery, Upriver Brights, North/Central BC, and Oregon Coastal (Figure 1.7). The "other" category is primarily driven by Upper Georgia Strait, Columbia River Summers, and Mid Columbia River Brights.

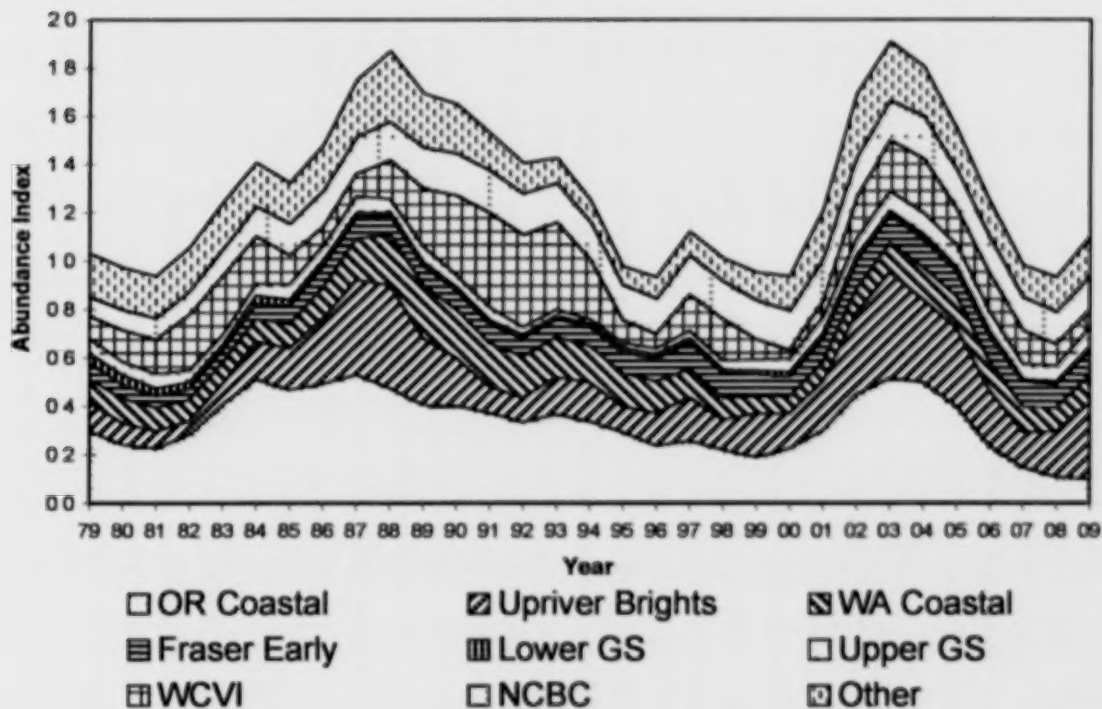


Figure 1.8. Total abundance indices for the Northern BC troll fishery with annual stock composition indicated by abundance indices for major model stocks from CLB 0907.

The major model stock groups contributing to the NBC AABM fishery AIs are: WCVI Natural and Hatchery, Upriver Brights, Oregon Coastal, North/Central BC, and Washington Coastal Wild and Hatchery (Figure 1.8). The "other" category is primarily driven by Columbia River Summers, Mid Columbia River Brights and Willamette Springs.

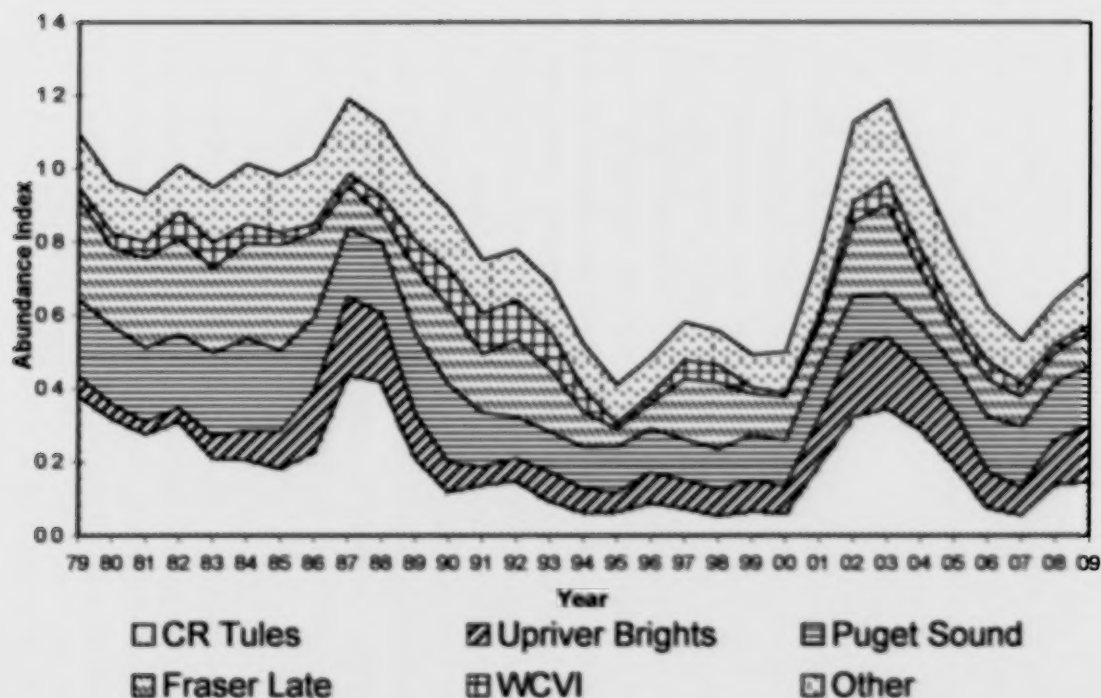


Figure 1.9. Total abundance indices for the WCVI troll fishery with annual stock composition indicated by abundance indices for major model stocks from CLB 0907.

The major model stock groups in the WCVI fishery are: Fraser Late, Puget Sound, Upriver Brights, and Columbia River Tules (Figure 1.9). The “Other” category is comprised primarily of Columbia River Summers and Oregon Coastal fish.

## 1.5.2 Overages and Underages

Until an approach for full implementation of overage/underage provisions has been developed and accepted by the PSC, the Commissioners have instructed the CTC to track and report overages and underages relative to agreed-upon harvest objectives.

### 1.5.2.1 AABM Fisheries

Table 1.5 shows the differences between the postseason allowable catches and the observed catches in AABM fisheries for 1999–2008, and the cumulative differential for those years. All three AABM fisheries have cumulative underages. In SEAK, observed catches have been below final allowable catches for three of the nine years; the cumulative differential is –1.1% or –0.9%. In NBC, observed catches have been below the final allowable catches in seven of the ten years; the cumulative differential is –23.8%. In WCVI, observed catches have been below allowable catches in five of the nine years; the cumulative differential is –9.4%.



Table 1.5. Deviations in numbers of Chinook salmon and percentages from catch targets derived from the first postseason AI (Table 1.2) for Pacific Salmon Treaty AABM fisheries in 1999 to 2008.

Year	SEAK		NBC		WCVI	
	Number of Fish	Percent Difference	Number of Fish	Percent Difference	Number of Fish	Percent Difference
1999	+14,642	+7.9%	-39,374	-31.2%	-70,587	-66.0%
2000	+7,993	+4.5%	-91,600	-74.2%	+15,238	+17.7%
2001	-63,381	-25.3%	-115,400	-72.6%	-27,830	-19.1%
2002	-14,767	-4.0%	-87,663	-36.9%	-31,764	-16.1%
2003	-60,081	-13.7%	-85,543	-30.9%	-93,079	-34.6%
2004	+1,281 +3,366	-0.3% +0.8%	-25,492	-9.5%	+7,024	+3.35%
2005	3,082	+0.8%	2,906	+1.2%	+22,962	+12.8%
2006	3,178	+0.9%	15,985	+8.0%	+1,383	+1.0%
2007	67,938	+26.2%	1,235	+0.9%	+17,250	+14.2%
2008	+10,885	+7.1%	-25,253	-20.9%	+8,826	+6.4%
Cum.	-31,792 -27,145 <sup>1</sup>	-1.1% -0.9% <sup>1</sup>	-450,199	-23.8%	-150,577	-9.4%

<sup>1</sup> The lower value results from subtracting a terminal exclusion catch for the Stikine River in 2004, which is in dispute.

#### 1.5.2.2 ISBM Indices by Stock

For ISBM fisheries, the Agreement specifies that Canada and the United States will reduce base period exploitation rates on specified stocks by 36.5% and 40%, equivalent to ISBM indices of 63.5% and 60% percent, respectively. This requirement is referred to as the 'general obligation' and does not apply to stocks that achieve their CTC agreed escapement goal. Estimated ISBM fishery indices are shown in Table 1.6 for Canadian fisheries and Table 1.7 for U.S. fisheries. Both tables present CWT-based indices for 2007, and Chinook model-based predicted indices for 2009. The agreement specifies that the indices for postseason assessment be assessed using the CWT-based estimates, 2007 is the most recent analysis available. CWT-based indices for 1999-2007 and model-based indices for 2001-2008 are presented in Appendix B.

##### 1.5.2.2.1 CWT-based Indices in 2007

Canadian ISBM indices from the CWT-based estimates for 2007 were reduced more than required under the agreement for five of the six CWT indices which could be calculated, the exception being WCVI Falls (Table 1.6). Several inconsistencies were identified in the way these indices had been computed in the past, as noted in the footnotes 4-9 in Table 1.6. Most of them were inconsistencies between the way indices had been calculated by the model versus in the CWT exploitation rate assessment. However, in the case of Lower Georgia Strait, Nanaimo was dropped from the CWT-based index because of concern about the way the terminal fishery rates were estimated. In addition, Nanaimo and Cowichan stocks are no longer reported separately in



the model-based index because a way to split the two stocks in the base period has not yet been developed.

Four of the 16 U.S. ISBM indices for the CWT-based estimates for 2007 were reduced more than required. The other 12 U.S. CWT-based ISBM indices exceeded 0.60. Ten of these stocks (Upriver Brights, Quillayute, Queets, Hoh, Lewis, Mid-Columbia Summers, Nehalem, Siletz, Siuslaw and Cowichan) have agreed escapement goals. Four of these stocks (Upriver Brights, Quillayute, Hoh, and Mid-Columbia Summers) met or exceeded their respective escapement goals, and thus are exempted from the general obligation. Figures 1.10 and 1.11 show the historical ISBM indices based on CWT recoveries for 1999-2007. It should be noted that this index is meaningless if escapement goals are met for these stocks. In the eventuality that a goal is not being met, then the general obligation needs to be achieved.

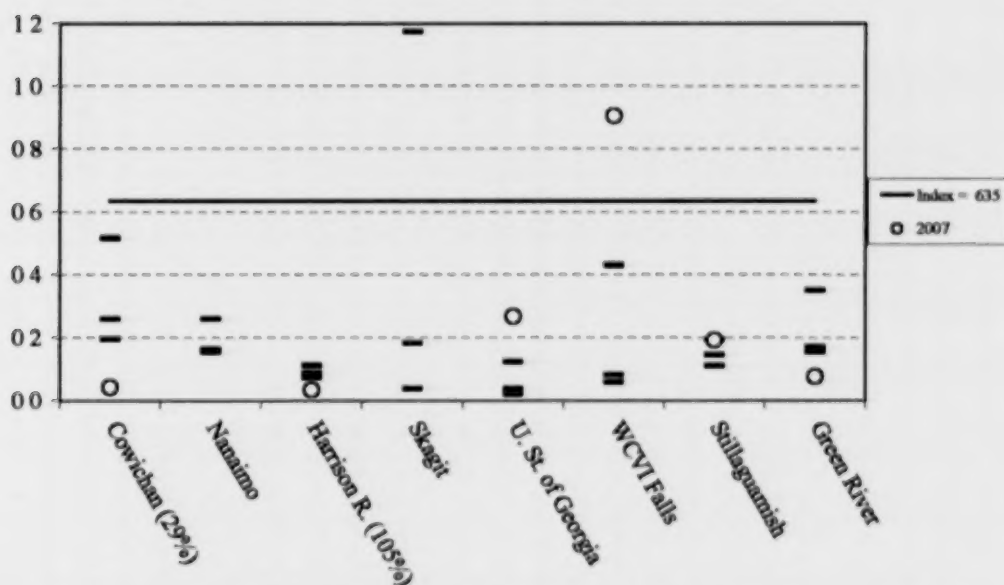


Figure 1.10. CWT-based ISBM indices for Canadian fisheries for 1999-2007. Value in brackets on stock axis is the 2007, percent of escapement goal.

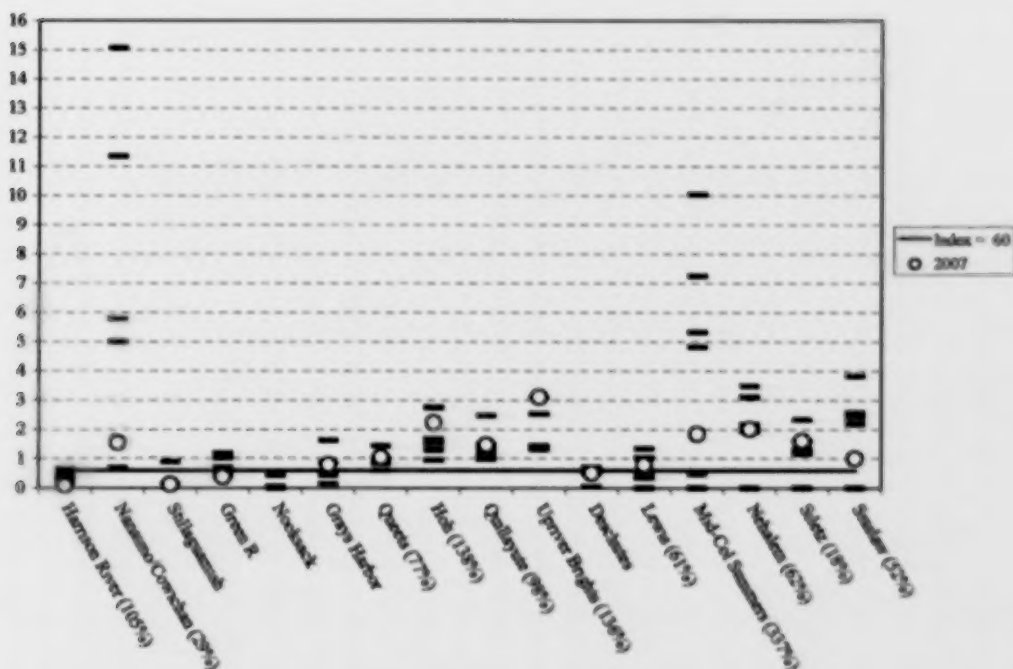


Figure 1.11. CWT-based ISBM indices for U.S. fisheries for 1999-2007. Value in brackets on the stock axis is the 2007, percent of escapement goal.

#### 1.5.2.2.2 Predicted ISBM Indices for 2009

Eight of the 19 ISBM indices for Canada, based on outputs from calibration 0907, are predicted to exceed the allowable value of 0.635 for Canadian ISBM fisheries in 2009 (Table 4). Seven of these eight stocks are Puget Sound Natural Summer/Fall stocks, and do not have CTC-accepted escapement goals. One of the eight stocks, the Lewis River, has a CTC escapement goal, but was below goal in 2008.

Eight of the 22 U.S. ISBM indices, based on calibration 0907, are predicted to be above the allowable limit of 0.60 for U.S. ISBM fisheries in 2009 (Table 5). Seven of the eight have CTC agreed escapement goals: Hoh, Quillayute, Upriver Brights, Mid-Columbia Summers, Nehalem, Siletz, and Siuslaw, with the exception being Lake Washington. Of the stocks with goals, four were at or above goal in 200, and three (the Oregon stocks) were below goal in 2008.

Table 1.6. Canadian 2007 ISBM indices based on CWT and the 2009 indices predicted from the PSC Chinook Model.

Stock Group	Escapement Indicator Stock	Canadian ISBM Indices	
		CWT Indices for 2007	Model Indices for 2009
Lower Strait of Georgia	Cowichan Nanaimo	0.043 <sup>4</sup> NA <sup>1,5</sup>	0.495 <sup>6</sup>
Fraser Late	Harrison River <sup>2</sup>	0.035 <sup>7</sup>	0.245
North Puget Sound Natural Springs	Nooksack Skagit	NA NA	0.988 0.988
Upper Strait of Georgia	Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish	0.268	0.128
Fraser Early (spring and summers)	Upper Fraser, Mid Fraser, Thompson	NA	0.094
West Coast Vancouver Island Falls	WCVI (Artlish, Burman, Kauok, Tahsis, Tashish, Marble)	0.906 <sup>9</sup>	0.137
Puget Sound Natural Summer / Falls	Skagit	NA	1.097
	Stillaguamish	0.192	1.123
	Snohomish	NA	1.098
	Lake Washington	NA	0.918 <sup>9</sup>
	Green River	0.076	0.919 <sup>9</sup>
North / Central B. C.	Yakoun, Nass, Skeena, Area 8	NA	0.224
Washington Coastal Fall Naturals <sup>3</sup>	Hoko, Grays Harbor, Queets <sup>2</sup> , Hoh <sup>2</sup> , Quillayute <sup>2</sup>	NA	0.328
Columbia River Falls <sup>3</sup>	Upriver Brights <sup>2</sup>	NA	0.517
	Deschutes	NA	0.517
	Lewis <sup>2</sup>	NA	0.832
Columbia R Summers <sup>3</sup>	Mid-Columbia Summers <sup>2</sup>	NA	0.285
Far North Migrating OR Coastal Falls <sup>3</sup>	Nehalem <sup>2</sup> , Siletz <sup>2</sup> , Siuslaw <sup>2</sup>	NA	0.543

<sup>1</sup> Not available (NA) because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc).

<sup>2</sup> Stock or stock group with a CTC agreed escapement goal.

<sup>3</sup> Stock group listed in Annex 4, Chapter 3, Attachment V.

<sup>4</sup> An inconsistency was discovered between the approaches used to calculate the model-based and CWT-based indices. The former included harvest rates for terminal sport while the latter did not. Terminal sport harvest rates are now included in the calculation of both indices. Further review is yet required to determine whether the base period terminal sport harvest rates obtained from analyses of Big Qualicum CWT recoveries adequately represent impacts that would have occurred on Cowichan Chinook.

<sup>5</sup> Several problems have been identified in the approach previously used to calculate the CWT-based indices for Nanaimo Chinook. Until these problems are resolved, indices for this stock will not be reported.

<sup>6</sup> Although model-based indices were previously calculated separately for Cowichan and Nanaimo, these did not adequately represent impacts on either LGS stock because the model-based data represent an aggregate of the two stocks and methods do not currently exist to correctly disaggregate these data for calculation of the ISBM values. Until such methods are developed, a single index value only will be reported representing the aggregate.

<sup>7</sup> The terminal sport harvest rates for Chilliwack Hatchery Chinook, the indicator stock, were removed from the calculation for the Harrison River naturals because sport harvest has been essentially zero on the natural population.

<sup>8</sup> An inconsistency was discovered between the approaches used to calculate the model-based and CWT-based indices. The former included harvest rates for terminal sport while the latter did not. Terminal sport harvest rates are now included in the calculation of both indices. A more extended review of the indices for WCVI Chinook will be carried out to determine whether they adequately represent impacts on the WCVI wild aggregate.

<sup>9</sup> For Canadian ISBM fisheries, Lake Washington and Green the same distribution and Index value are assumed.

<sup>10</sup> ISBM indices for WCVI naturals are based on information from Robertson Cr. hatchery stock, including terminal harvest rates. Prior to this report, harvest rates for terminal net and sport fisheries were treated as equal between the naturals and the hatchery indicator. However, this ignored the fact that since 1999, there has been no terminal net harvest of the vast majority of natural stocks on the WCVI. Consequently, indices for WCVI naturals were adjusted to reflect this zero terminal net harvest rate. In addition, some inconsistencies were noted in the treatment of terminal harvest rates between the model and CWT indices for this stock group. These inconsistencies were eliminated.

Table 1.7. U.S. 2007 ISBM indices based on CWT and the 2009 indices predicted from the PSC Chinook Model. Order of the stock groups correspond to Annex 4, Chapter 3, Attachment V of the PST 1999 Revised Annexes.

Stock Group	Escapement Indicator Stock	U.S. ISBM Indices	
		CWT Indices for 2007	Model Indices for 2009
Washington Coastal Fall Naturals	Hoko	NA <sup>1</sup>	0.284
	Grays Harbor	0.790	0.404
	Queets <sup>4</sup>	1.050	0.508
	Hoh <sup>4</sup>	2.230	0.981
	Quillayute <sup>4</sup>	1.470	0.881
Columbia River Falls	Upriver Brights <sup>4</sup>	3.100	0.798
	Deschutes	0.510	0.461
	Lewis <sup>4</sup>	0.790	0.470
Puget Sound Natural Summer / Falls	Skagit	NA	0.292
	Stillaguamish	0.120	0.446
	Snohomish	NA	0.202
	Lake Washington	NA	0.768
	Green R	0.380	0.555
Fraser Late	Harrison River <sup>4</sup>	0.080	0.410
Columbia R Summers	Mid-Columbia Summers <sup>4</sup>	1.840	1.236
Far North Migrating OR Coastal Falls	Nehalem <sup>4</sup>	2.010	2.003
	Siletz <sup>4</sup>	1.600	1.217
	Siuslaw <sup>4</sup>	1.000	1.632
North Puget Sound Natural Springs	Nooksack	NA	0.107
	Skagit	NA	0.143
Lower Strait of Georgia <sup>3</sup>	Cowichan,	1.550	0.367
	Nanaimo	1.550	0.367
Upper Strait of Georgia <sup>3</sup>	Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish	NA	NC <sup>4</sup>
Fraser Early (spring and summers) <sup>3</sup>	Upper Fraser, Mid Fraser, Thompson	NA	0.156
West Coast Vancouver Island Falls <sup>3</sup>	WCVI (Artlish, Burman, Kauok, Tahsis, Tashish, Marble)	NA	0.146
North / Central B. C. <sup>3</sup>	Yakoun, Nass, Skeena, Area 8	NA	NC <sup>4</sup>

<sup>1</sup> Not available (NA) because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc).

<sup>2</sup> NC means that the current model assumes the stock is not caught in U.S. ISBM fisheries.

<sup>3</sup> Stock group listed in Annex 4, Chapter 3, Attachment IV.

<sup>4</sup> Stock with a CTC agreed escapement goal.

## 1.6 MODEL CALIBRATION EVALUATION

Previous reports included evaluations of model performance for the most current model year, including comparisons of model estimates of catch and escapement/terminal run sizes to actual estimates of catch and escapement/terminal run size. This year, the model catches and stock escapements or terminal run sizes estimated by CLB 0907 were evaluated as were other aspects of the calibration. The calibration was distributed to the CTC membership for review and subsequently approved. Correlations between model and CWT fishery indices are normally presented. However, while these comparisons were made as part of the normal calibration checking process, the results are not presented in this report.

Fishery mortality indices generated by CLB 0907 can be compared to the CWT-based exploitation rate analysis. Model and CWT-based fishery mortality indices use the same equation, but the former are derived from model estimates of catch for all model stocks instead of CWT recovery data from specific exploitation rate indicator stocks. The CWT fishery mortality indices are considered the most accurate. Two types of fishery indices are presented; reported catch and total mortality. In general, the model results are closely associated with the CWT-based indices and changes in fishery exploitation rates as indicated in Figures 1.12 through 1.17. The SEAK fishery mortality index from the model closely follows the trend of the CWT derived estimate from 1979 through 1989 for both landed catch and total mortality (Figures 1.9 and 1.10). Between 1989 and 2000, the model estimate of both landed catch and total mortality indices is less than the CWT-derived estimate for most years but since 2001, the model estimate is noticeably higher. Since 1990, the model estimates also show less variability compared to the CWT-derived indices.

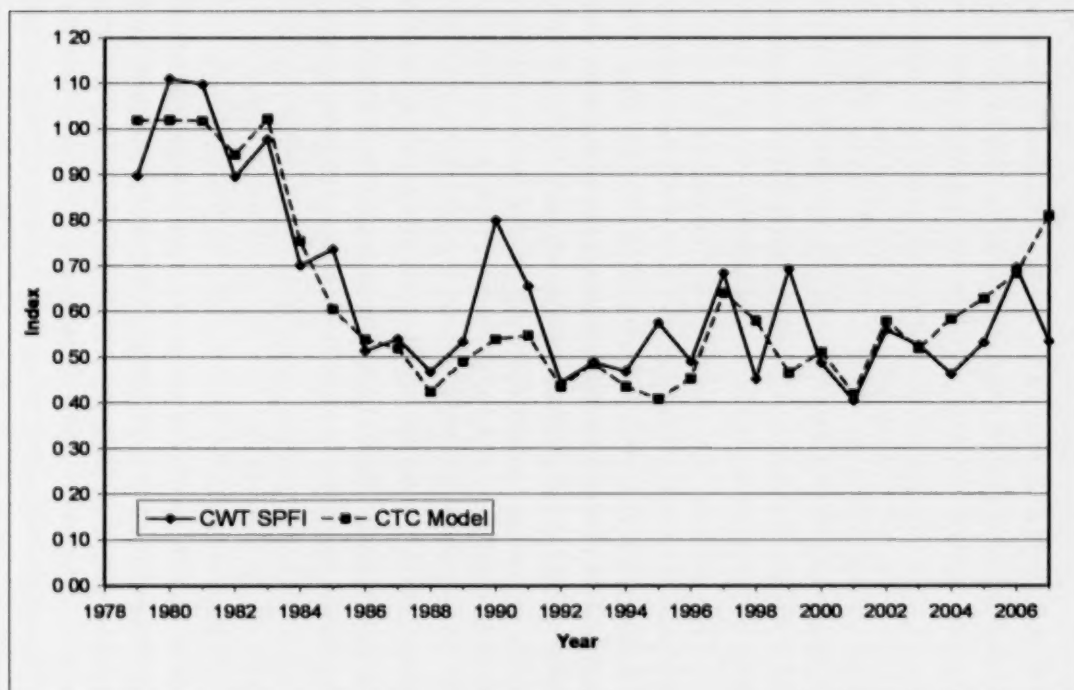


Figure 1.12. Estimated CWT (through 2007) and model landed catch fishery indices (through 2008) for the SEAK troll fishery.

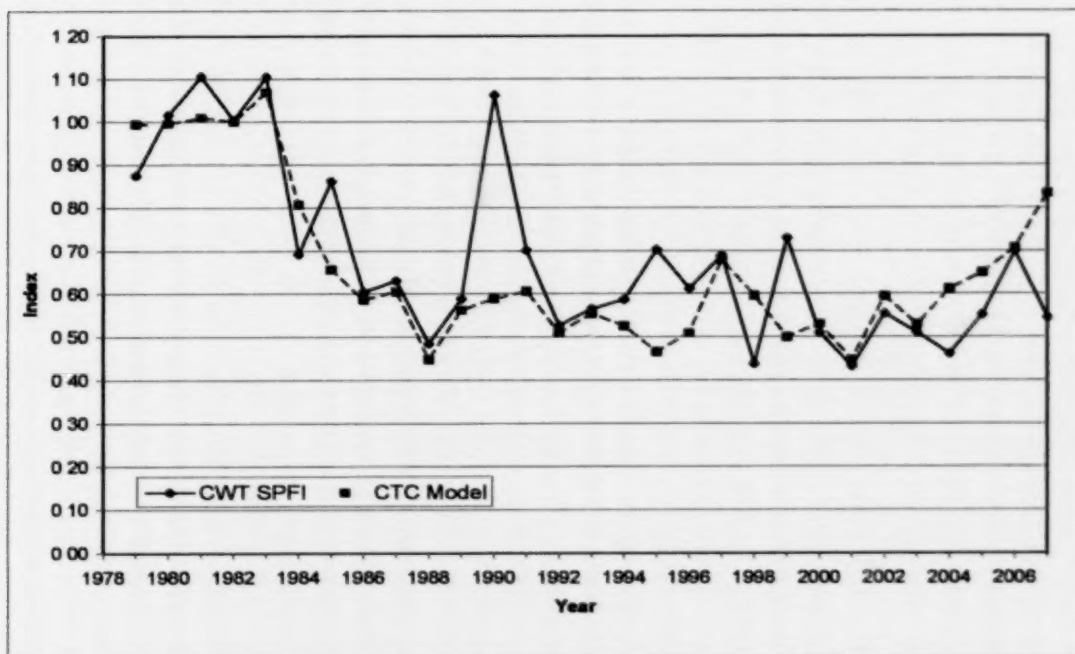


Figure 1.13. Estimated CWT (through 2007) and model total mortality fishery indices (through 2008) for the SEAK troll fishery.

The model-derived fishery mortality indices for NBC generally follow the same trend as CWT-derived indices (Figures 1.14 and 1.15). However, since 1991, the model-based estimates have exceeded the CWT-derived estimates in all but three years for both landed catch and total mortality indices. Since 2001, this difference has been noticeably large.



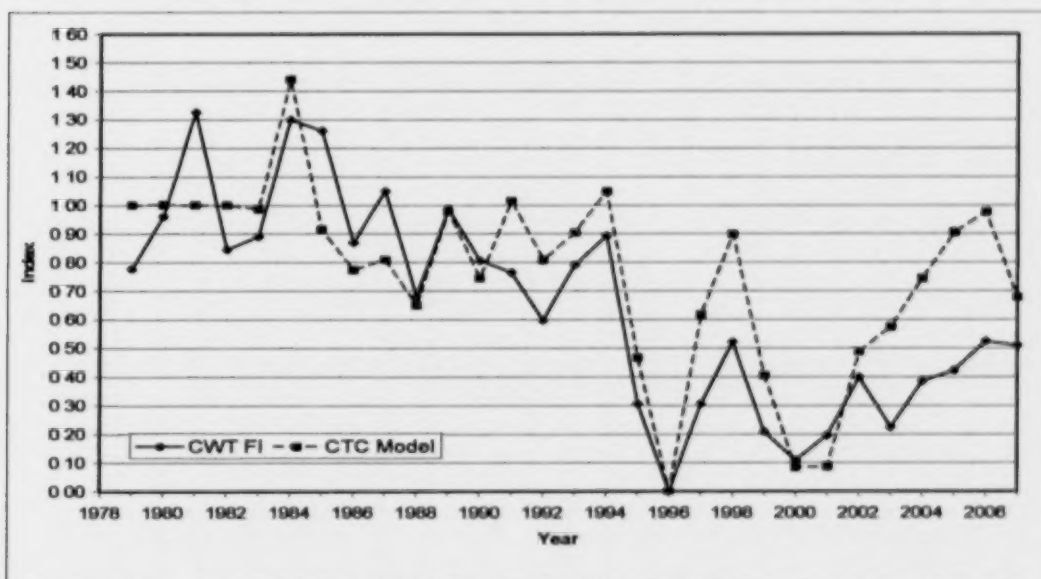


Figure 1.14. Estimated CWT (through 2007) and model landed catch fishery indices (through 2008) for the NBC troll fishery.

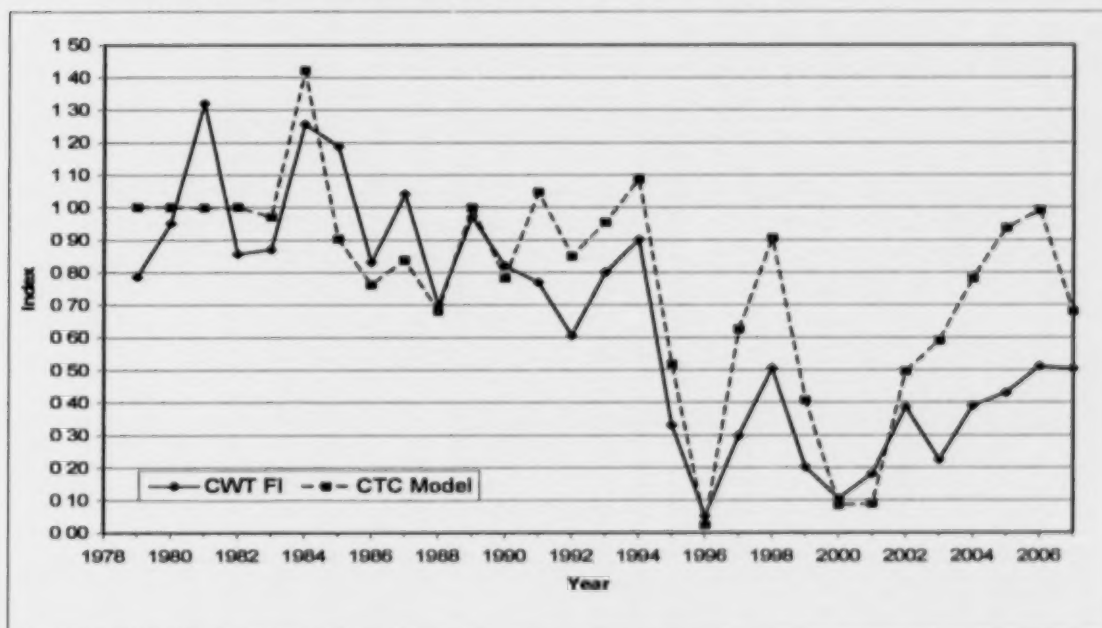


Figure 1.15. Estimated CWT (through 2007) and model total mortality fishery indices (through 2008) for the NBC troll fishery.

Since the base period, the model-derived landed catch fishery index estimates and trends for the WCVI troll fishery have been similar to those derived from CWTs. However, from 1987 through 1995, the model estimates are consistently greater than the CWT-based estimates (Figures 1.16

and 1.17). Starting in 2000, model and CWT estimates have diverged significantly for both landed catch and total mortality, with CWT indices being consistently higher than model indices.

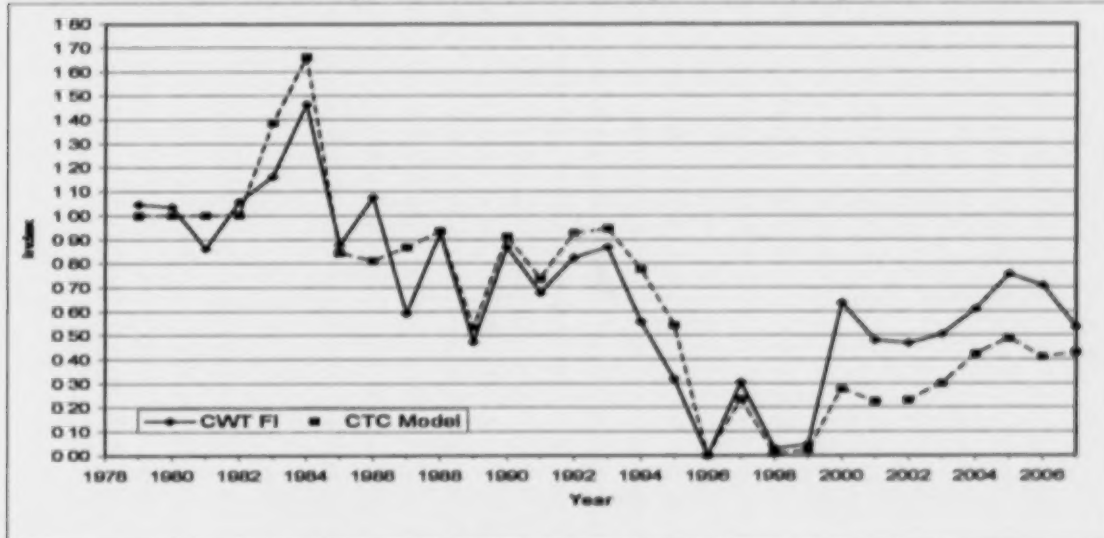


Figure 1.16. Estimated CWT (through 2007) and model landed catch fishery indices (through 2008) for the WCVI troll fishery.

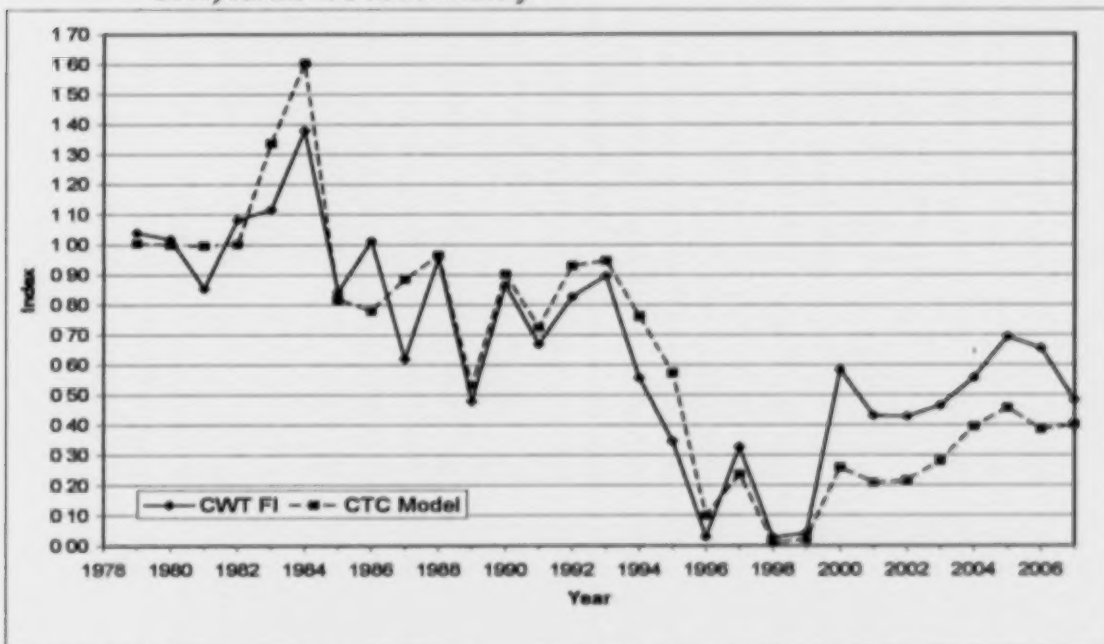


Figure 1.17. Estimated CWT (through 2007) and model total mortality fishery indices (through 2008) for the WCVI troll fishery.

## 1.7 AGENCY STOCK FORECAST USED IN THE MODEL.

A summary of model-produced and agency-produced forecasts from 1999-2009 is shown in Table 1.8. The relationship between the model stocks in Table 1.8 and exploitation rate indicator stocks and PST Annex stocks are shown in Appendix C. A major factor influencing how well the model can predict Chinook abundance in AABM fisheries is how well the model can predict the returns of Chinook (in terms of ocean escapement or spawning escapement) in the forecast year. During model calibration, agency forecasts are input to the model for all model stocks for which model forecasts are available. Thus, for model stocks with external forecasts, the variation between model forecasts and actual returns can be broken into two parts: 1) the ability of the model to match the input agency forecasts, and the ability of the agency forecasts to accurately predict the actual return of Chinook in the upcoming year. In Table 1.8, the column labeled 'Model Fcst/Agency Fcst' shows the percentage deviation of the model prediction from the agency forecast. The column labeled 'Agency Fcst/Postseason' shows the percentage deviation of the agency forecast from the actual return. The column labeled 'Model Fcst/Postseason' shows the percentage deviation of the model prediction of the return from the actual return. A value of 100% would indicate that the predicted and actual values were the same.

The model forecasts are similar to the agency forecasts on average. This result is strongly influenced by the incorporation of the agency forecasts into the model calibration procedure. The mean absolute percent error (MAPE) of all 'Model Fcst/Agency Fcst' is 12.2%, and the average percent error is 0.9%. For all agency forecasts, the MAPE is 31.1% and the average percent error is -0.2% with respect to the postseason estimate. For model forecasts, the MAPE is 35.7% with respect to the postseason estimate, whereas, the average percent error is -8.85%.

The effect of the error in predicting terminal returns or escapement on the AABM abundance indices varies between fisheries and stocks. There is no clear directional bias of this error. For example, a small stock (small in ocean abundance terms) that is over or under predicted will generally not have a large effect on a fishery's abundance index. Errors in predicting a large stock may or may not affect a fishery's index, depending on the contribution of that stock to the fishery in question (see Appendix F for the model estimated stock composition of selected ocean fisheries). In addition, since the abundance index is an index, rather than an absolute measure of abundance, over or under prediction of a stock's terminal return or escapement would not affect the abundance index of a fishery if the bias in the prediction is consistent over all years in the index, including the base.

Table 1.8. Preseason forecasts and postseason estimates for PSC model stocks, 1999-2009.

Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
AKS <sup>1</sup> (Alaska SSE)	1999	11,866	n/a	12,274	n/a	n/a	97%
	2000	18,967	n/a	16,196	n/a	n/a	117%
	2001	22,130	n/a	21,850	n/a	n/a	101%
	2002	15,650	n/a	18,790	n/a	n/a	83%
	2003	22,316	n/a	14,676	n/a	n/a	152%
	2004	11,880	n/a	17,414	n/a	n/a	68%
	2005	25,204	n/a	16,102	n/a	n/a	157%
	2006	17,988	n/a	20,866	n/a	n/a	86%
	2007	25,653	n/a	15,095	n/a	n/a	170%
	2008	14,626	n/a	13,865	n/a	n/a	105%
	2009	14,332	n/a	-	n/a	n/a	-
	AVG.				n/a	n/a	114%
NTM <sup>2</sup> (North/ Central BC)	1999	149,593	n/a	154,294	n/a	n/a	97%
	2000	159,818	n/a	188,482	n/a	n/a	85%
	2001	189,088	n/a	223,236	n/a	n/a	85%
	2002	228,073	n/a	147,157	n/a	n/a	155%
	2003	161,995	n/a	164,579	n/a	n/a	98%
	2004	171,070	n/a	152,207	n/a	n/a	112%
	2005	154,552	n/a	128,753	n/a	n/a	120%
	2006	133,627	n/a	151,812	n/a	n/a	88%
	2007	156,017	n/a	123,565	n/a	n/a	126%
	2008	131,262	n/a	105,806	n/a	n/a	124%
	2009	113,024	n/a	-	n/a	n/a	-
	AVG.				n/a	n/a	109%
REH+REIT <sup>3</sup> (WCVI Hatchery + Natural)	1999	78,074	68,400	101,683	114%	67%	77%
	2000	21,040	15,040	37,047	140%	41%	57%
	2001	33,702	30,633	87,004	110%	35%	39%
	2002	128,068	109,882	167,731	117%	66%	76%
	2003	111,430	105,801	215,346	105%	49%	52%
	2004	166,548	144,180	257,517	116%	56%	65%
	2005	244,768	218,840	156,837	112%	140%	156%
	2006	152,662	138,878	197,097	110%	70%	77%
	2007	151,925	117,321	118,082	129%	99%	129%
	2008	67,347	60,255	98,744	112%	61%	68%
	2009	63,200	58,382	-	108%	n/a	n/a
	AVG.				116%	68%	80%

Table 1.8. Continued.

Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
GSQ <sup>1</sup> (Upper Strait of Georgia)	1999	16,472	n/a	16,140	n/a	n/a	102%
	2000	19,452	n/a	22,603	n/a	n/a	86%
	2001	25,828	n/a	30,219	n/a	n/a	85%
	2002	41,492	n/a	30,675	n/a	n/a	135%
	2003	36,882	n/a	31,059	n/a	n/a	119%
	2004	39,766	n/a	28,473	n/a	n/a	140%
	2005	38,798	n/a	28,675	n/a	n/a	135%
	2006	39,577	n/a	33,024	n/a	n/a	120%
	2007	41,711	n/a	22,674	n/a	n/a	184%
	2008	30,065	n/a	20,641	n/a	n/a	146%
	2009	26,131	n/a	-	n/a	n/a	-
	AVG.				n/a	n/a	125%
GSH <sup>2</sup> (Lower Strait of Georgia Hatchery)	1999	23,648	n/a	25,258	n/a	n/a	94%
	2000	19,165	n/a	23,422	n/a	n/a	82%
	2001	17,547	n/a	34,775	n/a	n/a	50%
	2002	25,051	n/a	23,557	n/a	n/a	106%
	2003	22,409	n/a	24,084	n/a	n/a	93%
	2004	16,573	n/a	22,269	n/a	n/a	74%
	2005	21,046	n/a	28,226	n/a	n/a	75%
	2006	22,937	n/a	22,756	n/a	n/a	101%
	2007	24,378	n/a	13,155	n/a	n/a	185%
	2008	11,765	n/a	13,410	n/a	n/a	88%
	2009	7,371	n/a	-	n/a	n/a	-
	AVG.				n/a	n/a	95%
GST <sup>1</sup> (Lower Strait of Georgia Natural)	1999	14,737	n/a	8,763	n/a	n/a	168%
	2000	11,094	n/a	8,524	n/a	n/a	130%
	2001	7,955	n/a	8,569	n/a	n/a	93%
	2002	8,833	n/a	8,072	n/a	n/a	109%
	2003	8,088	n/a	5,360	n/a	n/a	151%
	2004	5,157	n/a	3,700	n/a	n/a	139%
	2005	4,459	n/a	5,415	n/a	n/a	82%
	2006	4,945	n/a	7,469	n/a	n/a	66%
	2007	7,782	n/a	4,778	n/a	n/a	163%
	2008	6,823	n/a	4,926	n/a	n/a	139%
	2009	5,691	n/a	-	n/a	n/a	-
	AVG.				n/a	n/a	124%

Table 1.8. Continued.

Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
FRE <sup>2</sup> (Fraser Early)	1999	163,342	n/a	105,473	n/a	n/a	155%
	2000	118,058	n/a	116,233	n/a	n/a	102%
	2001	122,333	n/a	154,175	n/a	n/a	79%
	2002	170,232	n/a	186,827	n/a	n/a	91%
	2003	175,919	n/a	188,183	n/a	n/a	93%
	2004	185,450	n/a	141,029	n/a	n/a	131%
	2005	151,591	n/a	134,641	n/a	n/a	113%
	2006	186,279	n/a	203,212	n/a	n/a	92%
	2007	196,060	n/a	110,884	n/a	n/a	177%
	2008	128,347	n/a	148,284	n/a	n/a	87%
	2009	129,707	n/a	-	n/a	n/a	-
	AVG.				n/a	n/a	112%
FRL <sup>1</sup> (Fraser Late)	1999	144,316	82,650	184,099	175%	45%	78%
	2000	187,970	222,400	120,744	85%	184%	156%
	2001	141,745	131,800	141,196	108%	93%	100%
	2002	132,946	160,100	165,245	83%	97%	80%
	2003	127,144	114,780	313,929	111%	37%	41%
	2004	104,597	97,227	196,396	108%	50%	53%
	2005	121,315	108,061	124,704	112%	87%	97%
	2006	116,263	116,682	108,639	100%	107%	107%
	2007	122,402	107,311	105,385	114%	102%	116%
	2008	125,100	116,038	88,012	108%	132%	142%
	2009	119,886	91,391	-	131%	-	-
	AVG.				112%	93%	97%
NKS <sup>1</sup> (Nooksack Spring)	1999	1068	n/a	251	n/a	n/a	425%
	2000	834	n/a	444	n/a	n/a	188%
	2001	982	n/a	531	n/a	n/a	185%
	2002	1216	n/a	513	n/a	n/a	237%
	2003	1301	n/a	414	n/a	n/a	314%
	2004	1708	n/a	448	n/a	n/a	381%
	2005	1549	n/a	330	n/a	n/a	469%
	2006	485	677	630	72%	107%	77%
	2007	582	575	334	101%	172%	174%
	2008	371	378	351	98%	108%	106%
	2009	336	315	-	107%	-	-
	AVG.				94%	129%	256%



Table 1.8. Continued.

Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
NKF <sup>2</sup> (Nooksack/ Samish Fall Fingerling)	1999	27,472	27,000	41,186	102%	66%	67%
	2000	21,277	19,000	32,646	112%	58%	65%
	2001	33,974	36,450	64,685	93%	56%	53%
	2002	50,361	54,420	54,302	93%	100%	93%
	2003	48,259	45,750	30,047	105%	152%	161%
	2004	37,980	34,200	17,913	111%	191%	212%
	2005	19,808	19,523	15,872	101%	123%	125%
	2006	16,854	16,899	30,591	100%	55%	55%
	2007	22,086	18,834	23,485	117%	80%	94%
	2008	34,392	35,271	28,969	98%	122%	119%
—	2009	20,813	23,014	-	90%	-	-
	AVG.				102%	100%	104%
SNO <sup>2</sup> (Snohomish Wild)	1999	5,823	5,600	4,832	104%	116%	121%
	2000	5,997	6,000	6,116	100%	98%	98%
	2001	5,876	5,760	5,414	102%	106%	109%
	2002	6,524	6,700	7,267	97%	92%	90%
	2003	6,033	5,450	5,571	111%	98%	108%
	2004	12,845	15,700	10,700	82%	147%	120%
	2005	10,161	n/a	4,611	n/a	n/a	220%
	2006	7,831	8,729	8,438	90%	103%	93%
	2007	11,153	12,289	4,005	91%	307%	278%
	2008	6,103	6,541	8,490	93%	77%	72%
—	2009	7,558	8410	-	90%	-	-
	AVG.				96%	127%	131%
SKG <sup>2</sup> (Skagit Summer/ Fall Wild)	1999	9,107	7,600	5,139	120%	148%	177%
	2000	6,988	7,300	16,266	96%	45%	43%
	2001	9,064	9,184	14,193	99%	65%	64%
	2002	12,635	13,455	18,114	94%	74%	70%
	2003	11,906	11,348	10,583	105%	107%	113%
	2004	18,761	20,359	22,144	92%	92%	85%
	2005	16,220	19,493	22,784	83%	86%	71%
	2006	22,765	21,811	21,246	104%	103%	107%
	2007	12,324	14,252	12,868	86%	111%	96%
	2008	18,598	18,302	14,035	102%	130%	133%
—	2009	19,607	20,400	-	96%	-	-
	AVG.				98%	96%	96%

Table 1.8. Continued.

Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
PSN <sup>2</sup> (Puget Sound Natural)	1999	28,800	28,400	31,014	101%	92%	93%
	2000	15,364	10,000	19,048	154%	52%	81%
	2001	19,938	18,900	35,542	105%	53%	56%
	2002	20,008	19,801	28,000	101%	71%	71%
	2003	25,743	26,600	17,656	97%	151%	146%
	2004	24,616	23,200	29,807	106%	78%	83%
	2005	22,208	17,715	9,812	125%	181%	226%
	2006	20,207	21,301	23,555	95%	90%	86%
	2007	18,964	17,014	22,670	111%	75%	84%
	2008	23,118	21,100	23,193	110%	91%	100%
	2009	20,287	23,073	-	88%	-	-
	AVG.				109%	93%	102%
STL <sup>1</sup> (Stillaguamish Summer/Fall Wild)	1999	1,332	n/a	1,098	n/a	n/a	121%
	2000	1,370	1,500	1,645	91%	91%	83%
	2001	1,328	1,360	1,386	98%	98%	96%
	2002	1,372	1,449	1,588	95%	91%	86%
	2003	1,860	2,050	988	91%	207%	188%
	2004	1,795	n/a	1506	n/a	n/a	119%
	2005	1,377	n/a	963	n/a	n/a	143%
	2006	1,116	1,169	1,254	95%	93%	89%
	2007	1,424	1,510	785	94%	192%	181%
	2008	689	637	1,800	108%	35%	38%
	2009	1,268	1,086	-	117%	-	-
	AVG.				99%	116%	115%
PSF+PSY <sup>2</sup> (Puget Sound Fingerling + Yearling)	1999	66,876	69,285	116,204	97%	60%	58%
	2000	67,306	69,800	67,540	96%	103%	100%
	2001	102,899	105,955	112,371	97%	94%	92%
	2002	114,889	124,608	103,805	92%	120%	111%
	2003	114,275	133,850	74,335	85%	180%	154%
	2004	127,902	132,300	87,548	97%	151%	146%
	2005	104,084	110,542	98,348	94%	112%	106%
	2006	107,452	113,486	118,036	95%	96%	91%
	2007	127,115	135,714	178,342	94%	76%	71%
	2008	166,071	159,200	137,925	104%	115%	120%
	2009	110,373	133,187	-	83%	-	-
	AVG.				94%	111%	105%

Table 1.8. Continued.

Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
WCN <sup>2</sup> (Washington Coastal Natural)	1999	42,129	43,780	24,951	96%	175%	169%
	2000	34,741	n/a	22,978	n/a	n/a	151%
	2001	34,563	35,306	35,783	98%	99%	97%
	2002	33,902	33,489	35,378	101%	95%	96%
	2003	32,785	n/a	41,135	n/a	n/a	80%
	2004	28,185	n/a	54,943	n/a	n/a	51%
	2005	34,857	n/a	37,255	n/a	n/a	94%
	2006	45,084	n/a	34,150	n/a	n/a	132%
	2007	35,695	32,362	36,499	110%	89%	98%
	2008	32,187	26,923	39,246	120%	69%	82%
	2009	29,758	31,318	-	95%	-	-
	AVG.				103%	105%	105%
WCH <sup>2</sup> (Washington Coastal Hatchery)	1999	35,239	42,752	14,044	82%	304%	251%
	2000	16,244	n/a	23,036	n/a	n/a	71%
	2001	15,792	n/a	23,359	n/a	n/a	68%
	2002	23,678	n/a	30,491	n/a	n/a	78%
	2003	20,755	18,222	31,259	114%	58%	66%
	2004	28,900	n/a	35,275	n/a	n/a	82%
	2005	28,626	n/a	32,421	n/a	n/a	88%
	2006	37,879	n/a	38,633	n/a	n/a	98%
	2007	41,801	40,497	35,880	103%	113%	117%
	2008	34,841	31,251	36,568	111%	85%	95%
	2009	35,603	42,595	-	84%	-	-
	AVG.				99%	140%	101%
CWS <sup>2</sup> (Cowlitiz Spring)	1999	3,363	3,950	4,799	85%	82%	70%
	2000	4,922	6,050	6,132	81%	99%	80%
	2001	3,684	4,849	7,182	76%	68%	51%
	2002	5,534	6,800	11,456	81%	59%	48%
	2003	9,550	11,700	25,522	82%	46%	37%
	2004	20,802	27,350	32,375	76%	84%	64%
	2005	18,349	24,850	15,724	74%	158%	117%
	2006	12,841	15,250	20,081	84%	76%	64%
	2007	9,945	10,600	11,959	94%	89%	83%
	2008	9,544	12,400	6,741	77%	184%	142%
	2009	5,122	14400	-	36%	-	-
	AVG.				77%	94%	76%

Table 1.8. Continued.

Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
WSH <sup>2</sup> (Willamette Spring)	1999	46,187	49,875	55,801	93%	89%	83%
	2000	57,202	61,211	57,592	93%	106%	99%
	2001	59,207	59,600	82,017	99%	73%	72%
	2002	73,151	77,434	127,200	94%	61%	58%
	2003	108,530	112,521	129,700	96%	87%	84%
	2004	113,708	112,701	112,701	101%	100%	101%
	2005	105,111	122,280	59,500	86%	206%	177%
	2006	48,879	52,388	52,388	93%	100%	93%
	2007	44,542	61,071	44,509	73%	137%	100%
	2008	20,185	40,851	40,050	49%	102%	50%
	2009	41,793	41,205	-	101%	-	-
	AVG.				89%	106%	92%
SUM <sup>2</sup> (Columbia River Summer)	1999	21,651	20,900	22,347	104%	94%	97%
	2000	27,214	28,038	23,169	97%	121%	117%
	2001	27,029	24,500	54,935	110%	45%	49%
	2002	70,290	77,700	92,820	90%	84%	76%
	2003	97,280	87,600	83,120	111%	105%	117%
	2004	83,246	78,589	65,446	106%	120%	127%
	2005	66,190	62,400	60,060	106%	104%	110%
	2006	75,893	78,512	78,196	97%	100%	97%
	2007	56,948	45,555	37,200	125%	122%	153%
	2008	50,171	52,000	55,500	96%	94%	90%
	2009	59,367	70,700	-	84%	-	-
	AVG.				102%	99%	103%
BON+CWF <sup>2</sup> (Bonneville + Cowlitz Hatcheries)	1999	26,651	34,800	39,881	77%	87%	67%
	2000	17,095	23,700	26,971	72%	88%	63%
	2001	28,732	32,200	94,240	89%	34%	30%
	2002	100,401	137,600	156,411	73%	88%	64%
	2003	100,196	115,900	154,960	86%	73%	65%
	2004	64,696	77,100	108,308	84%	71%	60%
	2005	65,971	74,100	73,861	89%	100%	89%
	2006	49,302	55,800	58,317	88%	96%	85%
	2007	49,219	54,900	32,689	90%	168%	151%
	2008	58,557	59,000	60,268	99%	98%	97%
	2009	66,704	88,800	-	75%	-	-
	AVG.				84%	91%	77%

Table 1.8. Continued.

Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
SPR <sup>2</sup> (Spring Creek Hatchery)	1999	62,831	65,800	50,189	95%	131%	125%
	2000	17,335	21,900	20,528	79%	107%	84%
	2001	56,089	56,600	124,954	99%	45%	45%
	2002	153,070	144,400	160,836	106%	90%	95%
	2003	89,116	96,900	180,592	92%	54%	49%
	2004	124,820	138,000	175,245	90%	79%	71%
	2005	92,021	114,100	93,145	81%	122%	99%
	2006	43,624	50,000	27,918	87%	179%	156%
	2007	19,421	21,800	14,583	89%	149%	133%
	2008	87,109	87,200	79,433	100%	110%	110%
	2009	32,585	59,300	-	55%	-	-
	AVG.				89%	107%	97%
URB <sup>2</sup> (Columbia Upriver Bright)	1999	173,866	147,500	165,889	118%	89%	105%
	2000	212,317	171,100	156,553	124%	109%	136%
	2001	150,973	127,200	232,491	119%	55%	65%
	2002	249,721	281,000	276,948	89%	101%	90%
	2003	246,890	280,400	373,191	88%	75%	66%
	2004	246,943	292,200	362,804	85%	81%	68%
	2005	318,535	352,200	268,744	90%	131%	119%
	2006	231,646	253,900	227,535	91%	112%	102%
	2007	168,594	182,400	114,491	92%	159%	147%
	2008	151,839	162,500	196,881	93%	83%	77%
	2009	226,413	259,900	-	87%	-	-
	AVG.				98%	99%	97%
LYF <sup>1</sup> (Snake River Wild)	1999	542	n/a	905	n/a	n/a	60%
	2000	1,243	n/a	1,148	n/a	n/a	108%
	2001	733	734	5,163	100%	14%	14%
	2002	2,066	n/a	2,116	n/a	n/a	98%
	2003	2,493	2,185	3,856	114%	57%	65%
	2004	4,323	3,725	4,443	116%	84%	97%
	2005	4,453	4,000	2,602	111%	154%	171%
	2006	8,310	3,500	2,743	237%	128%	303%
	2007	3,128	2,700	2,016	116%	134%	155%
	2008	2,718	2,534	1,598	107%	159%	170%
	2009	5,742	6,952	-	83%	-	-
	AVG.				123%	104%	124%

Table 1.8. Continued.

Stock	Year	Model Forecast	Agency Forecast	Postseason Return	Model Fcst/ Agency Fcst	Agency Fcst/ Postseason	Model Fcst/ Postseason
MCB <sup>1</sup> (Mid-Columbia Bright)	1999	37,997	38,300	50,800	-1%	-25%	-25%
	2000	53,460	50,600	37,200	6%	36%	44%
	2001	45,055	43,500	76,600	4%	-43%	-41%
	2002	102,085	96,200	108,400	6%	-11%	-6%
	2003	126,698	104,800	150,300	21%	-30%	-16%
	2004	94,895	90,400	122,600	9%	-26%	-23%
	2005	93,837	89,400	97,900	9%	-9%	-4%
	2006	90,881	88,300	80,471	3%	10%	13%
	2007	77,470	68,000	47,106	14%	44%	64%
	2008	59,481	45,000	75,489	32%	60%	79%
	2009	87,172	94,400	-	92%	-	-
	AVG.				17%	1%	8%
LRW <sup>2</sup> (Lewis River Wild)	1999	3,072	2,600	3,349	118%	78%	92%
	2000	4,053	3,500	10,234	116%	34%	40%
	2001	16,574	16,700	15,721	99%	106%	105%
	2002	18,910	18,200	24,948	104%	73%	76%
	2003	25,820	24,600	26,021	105%	95%	99%
	2004	24,590	24,100	22,327	102%	108%	110%
	2005	21,937	20,200	16,767	109%	120%	131%
	2006	19,826	16,600	17,896	119%	93%	111%
	2007	10,306	10,100	4,276	102%	236%	241%
	2008	4,479	3,800	7,120	118%	53%	63%
	2009	8,478	8,500	-	100%	-	-
	AVG.				108%	100%	107%
ORC <sup>1</sup> (Oregon Coastal)	1999	65,338	72,084	84,293	91%	86%	78%
	2000	61,457	63,259	69,074	97%	92%	89%
	2001	58,062	66,412	132,732	87%	50%	44%
	2002	73,055	73,914	176,929	99%	42%	41%
	2003	101,310	85,483	174,091	119%	49%	58%
	2004	135,716	131,904	129,579	103%	102%	105%
	2005	133,886	167,213	167,211	80%	100%	80%
	2006	126,393	136,373	112,797	93%	121%	112%
	2007	108,338	131,195	47,011	83%	279%	230%
	2008	53,417	70,101	39,615	76%	177%	135%
	2009	32,253	48,072	-	67%	-	-
	AVG.				90%	110%	97%

<sup>1</sup>= Escapement<sup>2</sup>= Terminal Run

\*\*Note that the model forecasts are the forecasts from separate yearly calibrations, not a time series of values from the most recent calibration\*\*



## **1.8 EVALUATION OF MARK-SELECTIVE FISHERIES.**

Chinook salmon released from Puget Sound hatcheries and spring Columbia River Chinook have been mass-marked since brood 1998, and mark selective fisheries (MSFs) have been in place in Puget Sound and on Columbia River spring Chinook since 2003 and on Columbia River spring Chinook since 2001 (Table 1.9). Mass marking of fall Chinook released from Columbia River facilities started with brood year 2005 and for brood year 2009 most of the Chinook production intended for harvest released in Washington and Oregon has been mass marked (SFEC, 2009). In 2009 MSFs for fall Chinook were proposed in Washington ocean fishery areas 1 and 2 (Table 1.9), although these were not implemented in 2009. In addition, a Canadian sport fishery on mass marked Chinook occurred in the Strait of Juan de Fuca and a second was proposed off of WCVI in 2009, but not implemented.

### **1.8.1 Catch in MSFs**

MSFs have been in place in Puget Sound in Washington Areas 5 and 6, part of Puget Sound north sport (PSN Sp), since 2003, during the summer months and in 2005 a winter MSF started in Washington Areas 8.1 and 8.2 (Puget Sound other sport, PSO S). In 2007, additional MSFs were implemented in Washington Areas 9, 10 and 11 (PSO S) in the summer months and in Areas 7 (PSN S), 9 and 10 (PSO S) in the winter months. Total landed catch in MSFs in marine sport fisheries remained fairly constant from 2003 to 2005, around 3,000 to 4,000, but then increased in 2007 to about 25,000 (Table 1.10), while landed catch in non-selective fisheries ranged from 20,000 to 26,000 over the same period (Figure 1.18). MSFs have been implemented in freshwater areas (TERM S) since 2003 (Table 1.11), with total estimated MSF catch ranging from 1,000 to 7,000. The percent of total MSF catch in the three PSC sport fisheries in Puget Sound (Figure 1.18) is at about 50% in PSN and increased from 0 to 50% in PSO. In the terminal area sport fishery (TERM S) the percent MSF has increased from 19 to 44% (Figure 1.18) from 2003 to 2007 (Table 1.10).

Chinook MSFs have been in place in the Columbia and Willamette River since 2001. Most of the catch from MSFs are spring Chinook from the Willamette River, and lower Columbia River fisheries directed at upper Columbia and Snake River mass marked spring Chinook. Total landed catch in MSFs have declined in recent years due to low spring Chinook runs in the Willamette (Figure 1-2) and lower upper Columbia spring Chinook runs relative to the period between 2001-2004.

### **1.8.2 Size of MSFs**

The size of a MSF relative to the total exploitation of a stock can be measured using tagged and marked PSC indicator stocks (Table 1.12), or as the percentage of total landed catch in net, sport and troll fisheries that is landed in MSFs. In Puget Sound the percentage of the total landed catch that occurs in MSFs increases over this period for stocks in South Puget Sound, particularly in 2007, when the MSFs expanded to most areas in Puget Sound. The Skagit spring tag groups (fingerlings and yearlings) also show a high percentage of catch in MSFs, due to the

terminal freshwater MSF targeting these fish, where 80-98% of the fish sampled in the Skagit MSF were tagged and marked fish (Table 1.11).

In the Columbia River, all of the tributary (terminal) sport fisheries for spring Chinook, including the Willamette, are MSF. There are also MSFs for steelhead and coho, resulting in summer and fall Chinook reported as landed in a MSF. Nevertheless, some of the tagged and marked groups show a high percentage taken in MSFs because of the terminal sport fishery (Table 1.12).

Table 1.9. Mark selective fisheries occurring from 2003-2009 (✓) and proposed for 2009 that did not take place (P). See TSFEC (2009) for more detailed information on MSF proposals and fisheries.

Fishery and Location	2003	2004	2005	2006	2007	2008	2009
Sport, Strait of Juan de Fuca, BC, selected subareas						✓	✓
Sport, WCVI selected subareas, mainly inside							<b>P</b>
Sport summer, WA area 5&6	✓	✓	✓	✓	✓	✓	✓
Sport summer, WA area 9,10,11,13					✓	✓	✓
Sport winter, WA area 5-13, (actual areas vary with year)			✓	✓	✓	✓	✓
Sport, Nooksack River		✓	✓	✓	✓	✓	✓
Sport, Skykomish River	✓	✓	✓	✓	✓	✓	✓
Sport, Carbon & Puyallup River	✓	✓	✓	✓	✓	✓	✓
Sport, Upper Skagit River			✓	✓	✓	✓	✓
Sport, Nisqually River, Jul-Jan			✓	✓	✓	✓	✓
Sport, Skokomish Chinook							<b>P</b>
Sport, WA Coast Chinook, Areas 1-2							<b>P</b>
Troll, WA Coast Chinook Areas 1-2							<b>P</b>
Sport, Columbia River (on summer run)	✓	✓	✓			✓	✓
Sport, Lower Columbia River (on spring run)	✓	✓	✓	✓	✓	✓	✓
Commercial, Lower Columbia River (on spring run with tangle net)	✓	✓	✓	✓	✓	✓	✓
Commercial, Lower Columbia River (on spring run with large net)	✓	✓	✓	✓	✓	✓	✓
Sport, Col. R. fall Chinook							<b>P</b>
Sport, Yakima River (on spring run)		✓	✓	✓	✓	✓	✓
Sport, Lower Snake River fall Chinook							<b>P</b>
Sport, Willamette River on spring run)	✓	✓	✓	✓	✓	✓	✓
Sport, Oregon coast						✓	✓

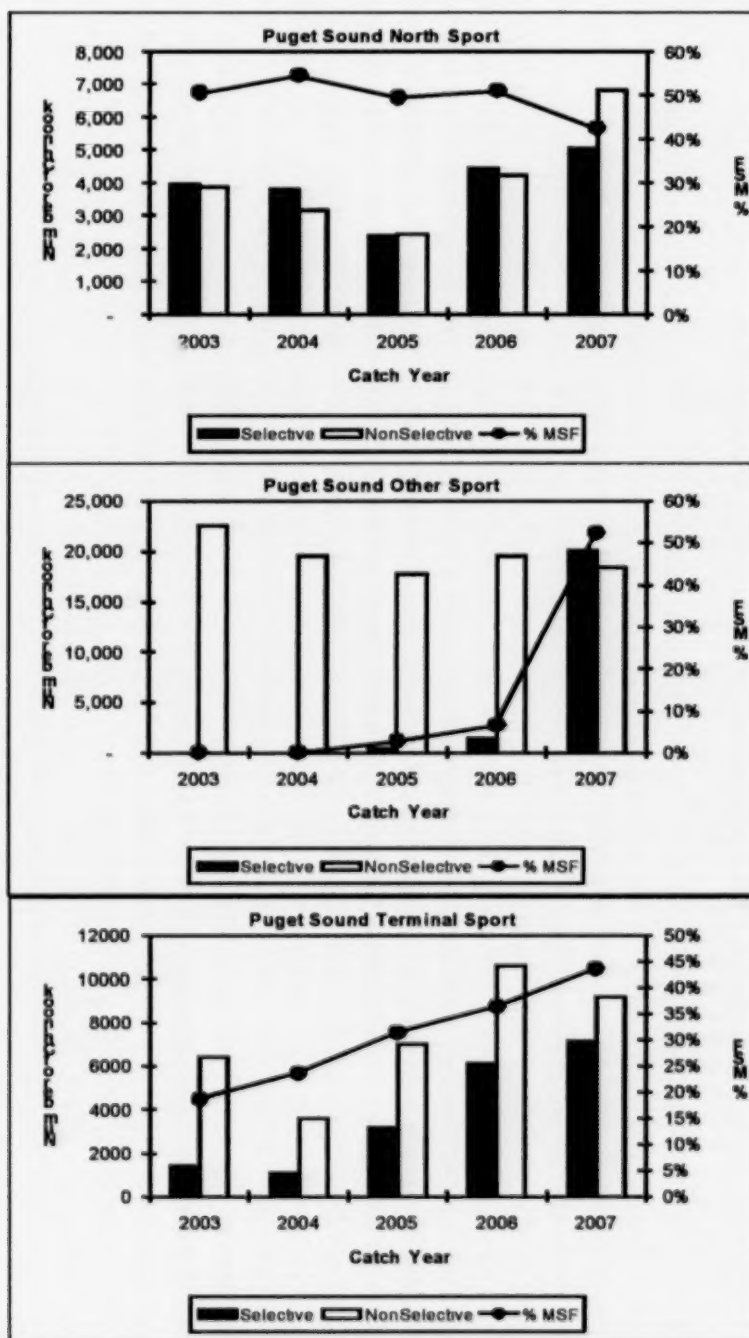


Figure 1.18. Estimated total catch in landed number of Chinook in Selective and Non-Selective fisheries (left y-axis) and % of catch in MSFs (right y-axis) in Puget Sound for catch years 2003-2007. Bars show the number of fish landed in fisheries and line shows the percentage of the total catch that was landed in mark selective fisheries (MSFs).

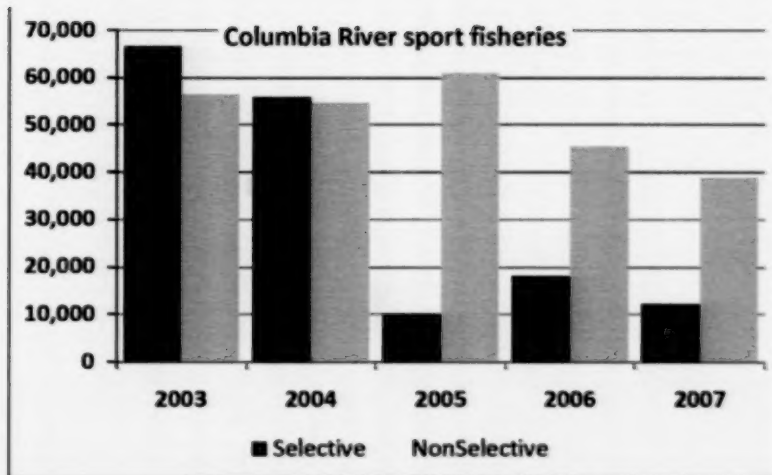


Figure 1.19. Estimated total catch in Columbia River mark selective and non selective sport fisheries for catch years 2003-2007. Total catch includes spring, summer and fall Chinook. Mark selective fisheries include unmarked steelhead non-retention and unmarked coho non-retention fisheries.

Table 1.10. Retained or landed catch and total encounters (landed+released) and total mortalities (landed+release mortalities) by size and mark category in MSFs for Puget Sound, and Juan de Fuca marine sport fisheries (PSN, PSO, JDF) for 2003-2007.

Fishery	Stat Area	Year	MSF period	Retained Marked Fish	Retained Unmarked fish	Encounters Marked	Encounters Unmarked	% Marked	Legal-sized Marked fish Landed & Release Mortalities	Legal-sized Unmarked fish Landed & Release Mortalities	Sub-Legal-sized Marked fish Landed & Release Mortalities	Sub-Legal-sized Unmarked fish Landed & Release Mortalities
PSN	Area 5/6	2003	Jul-Aug	3,417	76	4,850	8,627	36%	3,192	680	512	905
	Area 5/6	2004	Jul-Aug	3,571	5	4,598	6,365	42%	3,375	636	402	430
	Area 5/6	2005	Jul-Aug	2,025	53	3,125	3,237	49%	1,924	311	320	283
	Area 5/6	2006	Jul-Aug	3,641	25	4,494	5,095	47%	3,443	482	368	400
	Area 5/6	2007	Jul-Aug	3,972	124	5,235	3,839	58%	3,684	433	540	300
	Area 5	2008	Jul	2,819	0	3,298	2,199	60%	2,836	280	58	66
	Area 7	2008	Feb	1,300	2	1,767	1,199	60%	1,330	158	73	31
PSO	Area 8-1, 2	2005-06	Oct-Apr	1,112	40	3,262	2,010	62%	1,038	145	504	253
	Area 8-1, 2	2006-07	Oct-Apr	1,177	33	11,781	5,853	67%	1,059	61	2,239	1,123
	Area 8-1, 2	2007-08	Nov-Apr	1,543	23	4,040	1,388	74%	1,574	96	458	176
	Area 9	2007	Jul	5,239	32	6,757	1,667	80%	5,081	191	462	110
	Area 9	2008	Jan-Apr	1,405	3	2,880	682	19%	1,362	49	330	75
	Area 9	2008	Jul-Aug	4,045	3	7,854	5,436	59%	4,124	244	653	765
	Area 10	2007	Jul	1,539	38	4,301	1,044	80%	1,451	95	640	123
	Area 10	2007-08	Dec-Jan	635	21	2,575	545	83%	551	45	468	72
	Area 10	2008	Jul-Aug	1,031	3	1,348	898	60%	1,046	79	42	77
	Area 11	2007	Jun-Sep	10,546	95	17,534	4,779	79%	10,208	468	1,736	433
	Area 11	2008	Jun-Sep	7,377	23	10,434	2,269	82%	7,440	318	494	54
Canada JDF	Area 19, 20	2008	Apr-May	122	51	122 <sup>1</sup>	68 <sup>1</sup>	64%	122 <sup>2</sup>	64 <sup>2</sup>	5 <sup>2</sup>	3 <sup>2</sup>

<sup>1</sup>Legal sized Chinook

<sup>2</sup>IM and drop-off rates same as used in CTC Catch & Escapement report drop-off (6.9) and IM release rate (12.3)

Table 1.11. MSFs in Puget Sound TERM Sport for Chinook salmon 2003-2008. Catches of marked fish are reported where available for the calendar year; either from PSMFC catch sample database (a), preliminary catch record card estimates (b) or creel survey estimates (c). Fishery and years that were sampled are indicated by an (s)

Fishery, Location and Period	2003	2004	2005	2006	2007
Sport, Nooksack River, Sep-Dec		5 <sup>b</sup>	186 <sup>b</sup>	119 <sup>b</sup>	162 <sup>a</sup>
Sport, Skykomish River, Jun-Jul	177 <sup>b</sup>	85 <sup>b</sup>	76 <sup>b</sup>	78 <sup>b</sup>	637 <sup>a</sup>
Sport, Carbon & Puyallup River, Aug-Dec	1,287 <sup>a,s</sup>	1,019 <sup>a,s</sup>	1,590 <sup>a,s</sup>	1,736 <sup>a,s</sup>	2,525 <sup>a,s</sup>
Sport, Upper Skagit and Cascade River, Jun-Jul			173 <sup>a,s</sup>	458 <sup>a,s</sup>	724 <sup>a,s</sup>
Sport, Nisqually River, Jul-Jan			1,179 <sup>b</sup>	3,711 <sup>b</sup>	3,080 <sup>a</sup>



Table 1.12. Estimated landed catch of tagged and marked PSC Chinook Indicator Stocks in BC, Washington and Oregon in all net, troll and sport fisheries for catch years 2003-2007 and % of total tagged and marked catch that was landed in MSFs.

Region	Stock	2003		2004		2005		2006		2007	
		Total	%MSF	Total	%MSF	Total	%MSF	Total	%MSF	Total	%MSF
NBC	Big Qualicum	93	0.0%	130	0.0%	205	0.0%	134	0.0%	246	0.0%
	Kitsumkalum	175	0.0%	235	0.0%	142	0.0%	112	0.0%	167	0.0%
WCVI	Robertson Creek	1,167	0.0%	2,680	0.0%	2,300	0.0%	1,752	0.0%	1,712	0.0%
OST	Cowichan	234	1.1%	274	0.6%	193	1.9%	174	0.0%	49	0.0%
	Puntledge	29	0.0%	26	0.0%	71	0.0%	66	0.0%	56	0.0%
	Quinsam	207	0.0%	331	0.0%	390	0.0%	282	0.0%	287	0.0%
LFR	Chilliwack	1,273	1.6%	1,494	1.4%	1,184	0.9%	592	1.1%	365	2.1%
WA NPS	Nooksack Spr Finger	219	0.0%	449	0.0%	366	2.0%	326	1.9%	288	1.5%
	Samish Fall Finger	524	0.5%	354	1.8%	525	4.0%	1,311	2.2%	1,361	2.9%
	Skagit Spring Finger	228	1.1%	376	1.2%	413	11.0%	644	42.1%	1,176	37.1%
	Skagit Spring Yearling	436	1.7%	453	2.2%	470	19.0%	401	49.8%	449	50.8%
	Skykomish Fall Finger1	84	5.6%	234	5.8%	202	1.8%	272	8.9%	441	5.2%
	Skagit Summer Finger1	323	0.8%	200	2.1%	299	2.2%	308	3.0%	397	0.8%
	Stillaguamish Fall Fing	6	0.0%	-	-	122	4.6%	171	5.0%	322	1.5%
WA SPS	Green R Fall Finger	458	6.5%	466	3.0%	305	2.5%	662	3.3%	884	7.0%
	Grover's Cr Fall Finger	787	7.0%	740	4.7%	727	3.2%	888	6.5%	810	15.7%
	Nasqually Fall Finger	1,154	2.8%	921	1.4%	446	3.7%	1,837	2.5%	1,906	11.1%
	S Puget Sd Fall Year	5	0.0%	21	0.0%	226	7.0%	204	5.1%	227	23.7%
WA HC	Hood C Fall Finger	547	2.6%	625	5.9%	908	5.4%	556	4.7%	863	16.5%
SJDF	Hoko Fall Finger	217	0.0%	272	1.5%	230	2.0%	240	1.8%	328	1.3%
WA CST	Queets Fall Finger	887	0.0%	1,268	0.0%	1,310	0.0%	718	0.0%	576	0.0%
	Scoos Fall Finger1	359	1.3%	362	1.2%	339	0.0%	161	2.7%	53	0.0%
COLR	Cowlitz Tule	304	0.0%	116	3.6%	98	0.0%	54	0.0%	51	0.0%
	Columbia L River H	1,076	1.6%	922	0.2%	348	0.0%	45	0.0%	40	0.0%
	Spring Creek Tule	3,276	0.2%	2,544	0.6%	1,206	0.1%	471	1.6%	575	1.7%
	Columbia Summers	4,064	0.2%	3,863	0.4%	4,184	0.0%	2,538	0.2%	2,231	0.2%
LCOLR	Lewis River Wild	195	2.9%	353	0.0%	181	0.0%	351	0.0%	113	0.0%
	Willamette Spring	1,319	1.5%	2,044	3.5%	762	17.5%	692	36.1%	421	43.1%
U COLR	Hanford Wild	642	0.0%	826	0.0%	362	0.0%	325	0.0%	206	0.0%
	Upriver Bright	1,052	0.0%	999	0.4%	1,488	0.0%	930	0.5%	329	1.5%
SNAC	Lyons Ferry	117	0.0%	191	2.1%	145	5.1%	116	0.0%	253	1.2%
OR CST	Elk River	2,393	0.0%	2,520	15.9%	1,242	0.0%	1,393	0.0%	1,346	0.0%
	Salmon River	2,705	0.0%	2,887	0.0%	3,183	0.0%	1,477	0.0%	478	0.0%

### 1.8.3 Impact of MSFs

PSC indicator stocks that have been double index tagged (DIT) can be used to evaluate the impact of MSFs on the unmarked stocks represented by the unmarked tag group in a DIT pair<sup>1</sup>. The ratio of unmarked to marked fish ( $\lambda$ ) for a DIT group provides a relationship between the

<sup>1</sup> A DIT group consists of at least two tag groups, one with the mass mark (or adipose fin clip) and one without the mark. These two tag groups are treated identically except for the mark and differences in mortality should be due to the MSFs, assuming there is no mark mortality occurring prior to recruitment to the fisheries.

two tag groups and a measure to evaluate the impact of MSFs on the DIT stock. A comparison of the ratio of unmarked to marked measured at release and measured again at escapement

provides a method to evaluate the total impact of MSFs. The estimated odds ratio,  $\frac{\lambda_{\text{Escapement}}}{\lambda_{\text{Release}}}$

(Agresti, 1984) provides a measure to evaluate the impact of MSFs on a stock with DIT representation, where an odds ratio of one indicates that the ratio did not change from release to escapement and a ratio larger than 1 indicates the differential removal of marked fish due to MSFs (Figure 1.19 and Figure 1.20). The figures below show the odds ratio for DIT stocks for brood years 2001-2004. For the BC and Puget Sound stocks (Figure 1.), Skagit springs, Skykomish and Nisqually show the strongest indication that there is a differential impact of MSFs on marked and unmarked DIT groups, as the odds ratio is larger than one for all broods after 2002. These DIT stocks are subject to terminal sport MSFs which target the hatchery production including the DIT returns. Some stocks show annual variation (e.g., Nooksack and Samish), with the odds ratio being less than one for some years, which may indicate some issues with sampling.

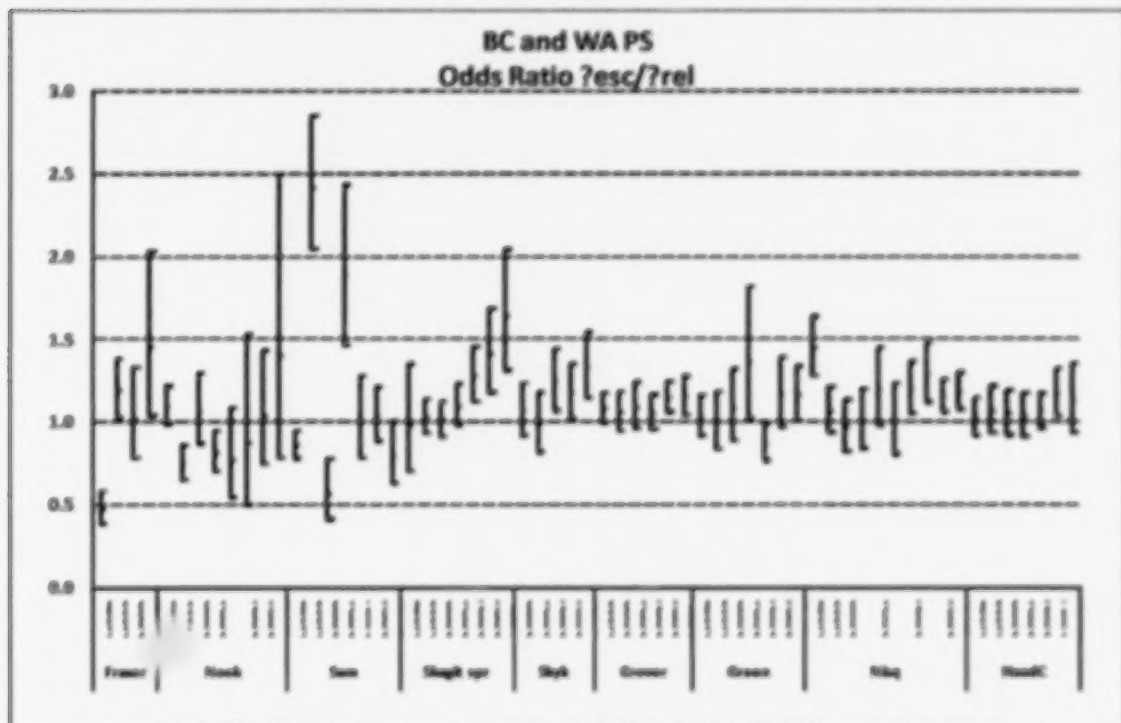


Figure 1.20. Estimated odds ratio (Ratio of unmarked to marked ratios estimated at hatchery escapement and at release) by brood year with 95% confidence intervals for Fraser River and Puget Sound DIT stocks.

For the Columbia River stocks (Figure 1.21), only Lewis River has a time series of more than 2 brood years. The Lewis River odds ratio greater than 1.0 is expected because the magnitude of the sport fisheries in the lower Columbia River tributaries were large and mark selective since 2001.

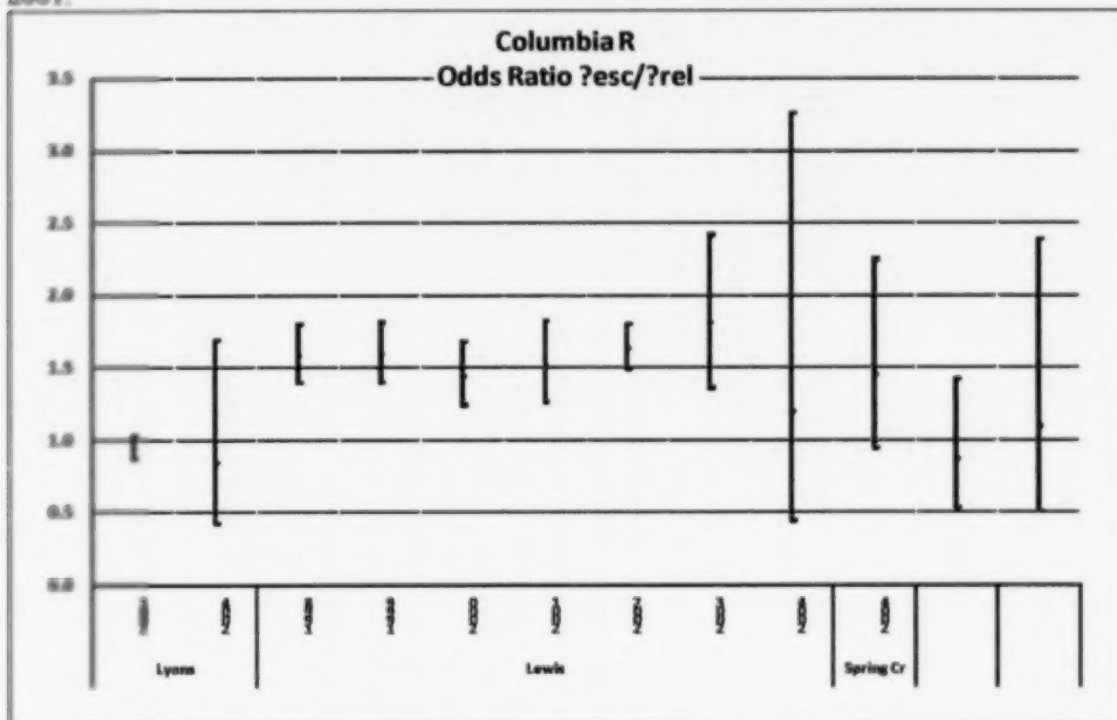


Figure 1.21. Estimated odds ratio (ratio of unmarked to marked ratios estimated at hatchery escapement and at release) with 95% confidence intervals for Fraser River and Columbia River DIT stocks.

## 1.8.4 Summary

MSFs have now been in place in Puget Sound since 2003 and Columbia River since 2001. Beginning in 2007 these fisheries have expanded to all areas of Puget Sound. Landed harvest in MSFs has increased to represent around 50% of the Puget Sound total sport harvest. This expansion is resulting in differential impacts on marked and unmarked components of some stocks, in particular those where terminal MSFs are intense, for spring Columbia River and for South Puget Sound stocks. MSFs expanded further in Puget Sound in 2008 and 2009. They were proposed for areas outside of Puget Sound and on the Columbia River fall stocks for 2009, including in pre-terminal Washington Ocean Areas 1 and 2, the Columbia River and the WCVI sport fisheries, targeting on Columbia River fall Chinook. Although these did not occur in 2009 they can be expected to be proposed for future years.

This increase in MSF impacts and differential impacts on marked and unmarked stocks requires that the analysis of CWT data and the model structure account for these differences.

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## **APPENDICES**

**Appendix A. Relationship between exploitation rate indicator stocks, escapement indicator stocks, model stocks, and additional management action stocks identified in the PST annex.**

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Appendix A.1. Indicator stocks for Southeast Alaska and Transboundary Rivers.

Area	Annex Stock Group <sup>1</sup>	Annex Indicator Stocks	Run Type	Escapement Indicator Stock	Escapement Objective	Model Stock	Escapement Goal in Model	Exploitation Rate Indicator Stock	CWT Acronym
SEAK/TBR			Spring	Taku	30,000–55,000	Alaska South SE	9,110	NA	AKS
				Stikine	14,000–28,000			NA	
Yakutat				Situk	500–1,000			NA	
				Alsek	1,100–2,300			NA	
SEAK Northern Inside				Chilkat	1,750–3,500			NA	
SEAK Central Inside				King Salmon	120–240			Alaska Spring (Little Port Walter, Neets Bay Hatchery, Whitman Lake Hatchery, Carroll Inlet Releases, Deer Mountain Hatchery, Crystal Lake Hatchery)	
SEAK Southern Inside				Andrew Creek	650–1,500				
				Unuk	650–1,400				
				Chickamin	450–900				
				Blossom	250–500				
				Keta	250–500				

<sup>1</sup> SEAK fisheries will be managed to achieve escapement objectives for Southeast Alaska and Transboundary River Chinook stocks

NA = not available

## Appendix A.2. Indicator stocks for Canada.

Area	Annex Stock Group	Annex Indicator Stocks	Run Type	Escapement Indicator Stock	Escapement Objective	Model Stock	Escapement Goal in Model	Exploitation Rate Indicator Stock	CWT Acronym
NBC-Area 1	North / Central British Columbia	Yakoun	Summer	Yakoun	Escapement goal range by stock	North / Central BC	117,500	Katsunkalum	KLM
NBC-Area 3		Nass	Spring/Summer	Nass					
NBC-Area 4		Skeena		Skeena					
CBC-Area 8			Spring	Dean					
CBC-Area 9			Spring/Fall	Rivers Inlet					
WCVI	West Coast Vancouver Island Falls	Artish, Burman, Gold, Kauok, Tahus, Tashsh, Marble	Fall	WCVI Aggregate (Artish, Burman, Kauok, Tahus, Tashsh, Marble)	Escapement goal range for aggregate	WCVI Natural	42,734	Robertson Creek	RBT
						WCVI Hatchery	6,472		
Upper Strait of Georgia	Upper Strait of Georgia	Kinaklin, Kakwekan, Wakeman, Kingcome, Nampksh	Summer/ Fall	Upper Strait of Georgia (Kinaklin, Kakwekan, Wakeman, Kingcome, Nampksh)	Escapement goal range for aggregate	Upper Strait of Georgia	23,300	Qamsam	QUJ
Lower Strait of Georgia	Lower Strait of Georgia		Summer/ Fall			Lower Strait of Georgia Hatchery	3,318	Puntledge	PPS
								Big Qualicum	BQR
		Cowichan, Nanaimo	Fall	Lower Strait of Georgia (Cowichan / Nanaimo)	Escapement goal range for aggregate	Lower Strait of Georgia Natural	21,935	Cowichan	COW
								Nanaimo	NAN
Fraser River	Fraser Early	Upper Fraser Mid Fraser Thompson	Spring	Fraser Spring-run Age 1 2	Escapement goal range by stock	Fraser Early	93,700	Nicola	NIC
				Fraser Spring-run Age 1 3				Dome	DOM
			Summer	Fraser Summer-run Age 1 3				NA	NA
				Fraser Summer-run Age 0 3				Lower Shuswap	SHU
	Fraser Late	Harrison River	Fall	Harrison River	75,100-98,500	Fraser Late	75,100	Chilliwack	CHI

### Appendix A.3. Indicator stocks for Puget Sound.

Area	Annex Stock Group	Annex Indicator Stocks	Run Type	Escapement Indicator Stock	Escapement Objective	Model Stock	Escapement Goal in Model	Exploitation Rate Indicator Stock	CWT Acronym
North/ Central Puget Sound	North Puget Sound Natural Springs	Nooksack	Spring	Nooksack	Escapement goal range by stock	Nooksack Spring	4,000	Nooksack Spring Fingerling Nooksack Spring Yearling	NSF NKS
		Skagit		Skagit spring				Skagit Spring Fingerling Skagit Spring Yearling	SKF SKS
	North Puget Sound Natural Summer/Falls	Nooksack	Summer/ Fall		Escapement goal range by stock	Nooksack Fall	11,923	Samish Fall Fingerling	SAM
		Snohomish		Snohomish		Snohomish Wild	5,250	Skykomish	SKY
		Skagit group		Skagit sum/fall		Skagit Wild	9,778	Skagit Summer Fingerling	SSF
		Lake Washington		Lake Washington Falls		Puget Sound Natural Fingerling	16,966	NA	
		Green River		Green River					
		Stillaguamish		Stillaguamish		Stillaguamish Wild	2,000	Stillaguamish Fall Fingerling	STL
								Nisqually Fall Fingerling	NIS
								Univ. of Washington Accelerated Fall	UWA
Hood Canal	Not an Annex stock		Fall					George Adams Fall Fingerling	GAD
South Puget Sound	Not an annex stock		Fall			Puget Sound Hatchery Fingerling	24,769	South Puget Sound Fall Fingerling	SPS
								South Puget Sound Fall Yearling	SPY
						Puget Sound Hatchery Yearling	9,136	Squaxin Pens Fall Yearling	SQP
			Spring					White River Spring Yearling	WRY

NA = not available

Appendix A.4. Indicator stocks for the Washington Coast.

Area	Annex Stock Group	Annex Indicator Stocks	Run Type	Escapement Indicator Stock	Escapement Objective	Model Stock	Escapement Goal in Model	Exploitation Rate Indicator Stock	CWT Acronym
WA Coast/ Juan de Fuca	Washington Coastal Fall Naturals	Hoko	Fall	Hoko	Escapement goal range by stock	Washington Coastal Wild	21,500	Elwha Fall Fingerling	ELW
								Hoko Fall Fingerling	HOK
		Grays Harbor		Grays Harbor Fall				NA	
		Queets		Queets Fall				Sooes Fall Fingerling	SOO
		Hoh		Hoh Fall				NA	
		Quillayute		Quillayute Fall				NA	
		Queets		Queets Fall				Queets Fall Fingerling	QUE
	Not an annex stock		Fall			Washington Coastal Hatchery	6,703	NA	
	Not an annex stock		Spring	Grays Harbor Spring				NA	
	Not an annex stock		Spring/ Summer	Queets Spring/Summer				NA	
				Hoh Spring/Summer				NA	
	Not an annex stock		Summer	Quillayute Summer				NA	

NA = not available

Appendix A.5. Indicator stocks for Columbia River and Oregon Coast.

Area	Amnes Stock Group	Amnes Indicator Stocks	Run Type	Escapement Indicator Stock	Escapement Objective	Model Stock	Escapement Goal in Model	Exploitation Rate Indicator Stock	CWT Acronym
Columbia River	Not an Amnes stock		Spring			Cowlitz Spring Hatchery	2,500	NA	
						Willamette River Hatchery	13,500	Willamette Spring	WSH
	Columbia River Summers	Mid-Columbia Summers	Summer	Mid Columbia Summer	17,857 <sup>1</sup>	Columbia River Summer	17,857	Columbia Summers	SUM
	Columbia River Falls		Fall			Fall Cowlitz Hat	8,800	Cowlitz Tail	CWT
						Spring Creek Hatchery	7,000	Spring Creek Tail	SPR
						Lower Bonneville Hatchery	26,200	Columbia Lower River Hatchery	LRH
				Columbia Upper River Bright		Columbia Upper River Brights	40,000	Columbia Upper River Bright	URB
								Hanford Wild	HAN
				Deschutes River Fall				NA	
						Lynn Ferry	3,430	Lynn Ferry	LYF
						Mid Columbia River Brights	12,500	NA	
				Lewis River	5,700	Lewis River Wild	5,700	Lewis River Wild	LRW
North Oregon Coast	Far North Migrating Oregon Coastal Falls	Nehalem	Fall	Nehalem	6,989	Oregon Coast	62,382	Salmon River	
		Sonlaw		Sonlaw	12,925				
		Siletz		Siletz	2,944				
Mid-Oregon Coast	Not an Amnes stock		Fall	Umpqua				NA	
				Mid South Oregon Coastal Falls				NA	

<sup>1</sup> Interim goal for modeling based on stock recruitment analysis of model data

NA – not available

## **Appendix B. ISBM indices.**

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Appendix B.1. ISBM Indices for Canadian fisheries, CWT-based exploitation rate analysis (1999-2007).

Stock Group	Escapement Indicator Stocks	CWT Indices <sup>1</sup>								
		1999	2000	2001	2002	2003	2004	2005	2006	2007
Lower Strait of Georgia	Cowichan	0.517	0.196	0.260	0.247	0.363 <sup>6</sup>	0.284	0.132	0.191	0.043
	Nanaimo <sup>5</sup>	0.163	0.154	0.260	0.247	NA <sup>7</sup>	NA	NA	NA	NA
Fraser Late	Harrison River <sup>3</sup>	0.112	0.073	0.090	0.105	0.055 <sup>8</sup>	0.032	0.058	0.032	0.035
North Puget Sound Natural Springs	Nooksack	0.183	1.176	0.040	0.023	0.046	NA	NA	NA	NA
	Skagit	NA	NA	NA	NA	NA	NA	NA	NA	NA
Upper Strait of Georgia	Klimakint, Kakwikan, Wakemah, Kungcome, Numpkash	0.021	0.123	0.040	0.063	0.006	0.018	0.028	0.079	0.268
Fraser Early (spring and summers)	Upper Fraser, Mid Fraser, Thompson	NA	NA	NA	NA	NA	NA	NA	NA	NA
West Coast Vancouver Island Falls <sup>12</sup>	WCVI (Artush, Burman, Kasuk, Tahus, Tashush, Marble)	0.245	0.061	0.100	0.248	0.496	0.488	0.986	0.267 <sup>10</sup>	0.906
Puget Sound Natural Summer / Falls	Skagit	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Stillaguamish	0.194	0.111	0.145	NA	NA	0.027	0.057	0.074	0.192
	Snohomish	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lake Washington	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Green River	0.171	0.154	0.350	0.323	0.328	0.162	0.085	0.109	0.076
North / Central B C	Yakum, Nan, Skeena, Area B	NA	NA	NA	NA	NA	NA	NA	NA	NA
Washington Coastal Fall Natural <sup>4</sup>	Hoko, Gray Harbor, Quacets, Hoh, Quilayute	NA	NA	NA	NA	NA	NA	NA	NA	NA
Columbia River Falls <sup>4</sup>	Upper Brights	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Deschutes	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lewis <sup>3</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA
Columbia R Summers <sup>4</sup>	Mid-Columbia Summers <sup>3</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA
Far North Migrating OR Coastal Falls <sup>4</sup>	Nehalem <sup>3</sup> , Siletz <sup>2</sup> , Sustaw <sup>3</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA

Appendix B.2.ISBM Indices for U.S. fisheries, CWT-based exploitation rate analysis (1999-2007).

Stock Group	Escapement Indicator Stocks	CWT Indices <sup>1</sup>								
		1999	2000	2001	2002	2003	2004	2005	2006	2007
Washington Coastal Fall Naturals	Hoko	NA	NA	NA	NA	NA	NA	NA	NA <sup>2</sup>	NA <sup>1</sup>
	Grays Harbor	0.43	1.63	0.86	0.54	0.15	0.53	0.56	0.52	0.790
	Queets	1.00	0.85	1.44	0.84	0.85	0.84	2.05	0.60	1.050
	Hoh	1.54	2.75	1.66	0.95	1.34	1.22	1.03	1.29	2.230
	Quillayute	1.30	2.47	1.48	1.42	0.99	1.15	1.03	1.18	1.470
Columbia River Falls	Upriver Brights	1.37	2.53	1.35	1.32	1.43	1.74	1.78	3.08	3.100
	Deschutes	0.51	0.71	0.52	0.59	0.049	0.51	0.67	0.58	0.510
	Lewis <sup>5</sup>	0	0.36	0.58	0.56	1.03	0.17	0.98	1.33	0.790
Puget Sound Natural Summer / Falls	Skagit	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Stullaguamish	0.12	0.04	0.89	NA	NA	0.01	0.22	0.08	0.120
	Snohomish	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lake Washington	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Green R	0.5	0.7	1.18	1.07	1.03	1.01	0.17	0.37	0.380
Fraser Late	Harrison River <sup>3</sup>	0.47	0.13	0.31	0.41	0.64	0.32	0.24	0.16	0.080
Columbia R Summers	Mid-Columbia Summers <sup>3</sup>	1.64	4.82	5.32	7.25	10.04	2.69	6.08	0.48	1.840
Far North Migrating OR Coastal Falls	Nehalem <sup>3</sup>	1.96	1.97	1.94	2.170	3.11	1.80	2.00	3.48	2.010
	Siletz <sup>3</sup>	0.82	1.16	1.19	1.310	1.59	2.29	1.19	2.34	1.600
	Sunlaw <sup>3</sup>	1.22	2.45	2.18	2.560	3.82	1.03	1.63	2.23	1.000
North Puget Sound Natural Springs	Nooksack	0.44	0	0.04	NA	NA	NA	NA	NA	NA
	Skagit	NA	NA	NA	1.12	NA	NA	NA	NA	NA
Lower Strait of Georgia <sup>4</sup>	Cowichan,	NA	0.69	11.35	5.78	4.99	7.25	10.23	15.07	1.550
	Nanaimo	NA	0.69	11.35	5.78	4.99	7.25	10.23	15.07	1.550
Upper Strait of Georgia <sup>4</sup>	Kinaklin, Kakweikan, Wakeman, Kingcome, Nimpkish	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fraser Early (spring and summers) <sup>4</sup>	Upper Fraser, Mid Fraser, Thompson	NA	NA	NA	NA	NA	NA	NA	NA	NA
West Coast Vancouver Island Falls <sup>4</sup>	WCVI (Arthsh, Burman, Kauok, Tahus, Tashsh, Marble)	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Yakoun, Nass, Skoena, Area 8	NA	NA	NA	NA	NA	NA	NA	NA	NA

Appendix B.3. ISBM Indices for Canadian fisheries, from the Chinook model (1999-2009) used to establish the AI for each year.  
Order of the stock groups corresponds to Annex 4, Chapter 3, Attachment IV and V of the PST 1999 Revised Annexes.

Stock Group	Management Indicator  Stocks	Model Indices										
		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
		CLB0107	CLB0107	CLB0107	CLB0206	CLB0308	CLB0404	CLB0506	CLB0604	CLB0705	CLB0807	CLB0907
Lower Strait of Georgia	Cowichan	0.304	0.232	0.325	0.541	0.490	0.593	0.381 <sup>8</sup>	0.590 <sup>8</sup>	0.240 <sup>8</sup>	0.315 <sup>8</sup>	0.495
	Nanaimo <sup>3</sup>	0.209	0.113	0.246	0.190	0.498	0.695	0.695				
Fraser Late	Harrison River <sup>3</sup>	0.309	0.198	0.336	0.302	0.352	0.719	0.332	0.294	0.211	0.208	0.245
North Puget Sound Natural Springs	Nooksack	0.233 NA	0.156	0.241	0.195	0.251	0.273	0.314	0.993	0.563	0.470	0.988
	Skagit		NA	NA	NA	0.251	0.273	0.314	0.993	0.563	0.470	0.988
Upper Strait of Georgia	Klinaklm, Kwakwaka, Wakeman, Kingcome, Nimpkish	0.174	0.118	0.314	0.272	0.649	0.971	0.649	0.584	0.146	0.622	0.128
Fraser Early (spring and summers)	Upper Fraser, Mid Fraser, Thompson	0.125	0.124	0.210	0.145	0.661	0.718	0.654	0.610	0.159	0.207	0.094
West Coast Vancouver Island Falls <sup>12</sup>	WCVI (Arthurs, Burman, Kasok, Tahsis, Tashish, Marble)	0.434	0.074	0.064	0.452	0.365	0.409	0.507	0.414	0.763	0.149 <sup>10</sup>	0.137
Puget Sound Natural Summer / Falls	Skagit	0.197	0.119	0.217	0.172	0.436	0.438	0.465	1.092	0.718	0.724	1.097
	Stillaguamish	0.355	0.234	0.469	0.375	0.513	0.567	0.587	1.166	0.821	0.796	1.123
	Snohomish	0.185	0.116	0.222	0.176	0.435	0.445	0.457	1.101	0.736	0.721	1.098
	Lake Washington	0.332	0.202	0.355	0.275	0.508	0.446	0.497 <sup>11</sup>	0.898	0.735	0.722	0.918
	Green River	0.333	0.202	0.356	0.275	0.508	0.466	0.497 <sup>11</sup>	0.914	0.752	0.721	0.919
North / Central B C	Yakoun, Nana, Skeena, Area B	0.237	0.254	0.613	0.584	0.689	0.804	0.680	0.626	0.202	0.593	0.224
Washington Coastal Fall Natural <sup>4</sup>	Hoko, Grays Harbor, Quacets, Hoh, Quillayute	0.201	0.161	0.354	0.292	0.292	0.435	0.457	0.363	0.194	0.386	0.328
Columbia River Falls <sup>4</sup>	Upriver Brights	0.124	0.104	0.377	0.429	0.686	0.663	0.640	0.523	0.129	0.612	0.517
	Deschutes	0.124	0.104	0.377	0.429	0.686	0.663	0.640	0.523	0.129	0.612	0.517
	Lewis <sup>3</sup>	0.056	0.180	0.180	0.171	0.515	0.480	0.546	0.315	0.030	0.912	0.832
Columbia R Summers <sup>4</sup>	Mid-Columbia Summers <sup>3</sup>	0.109	0.085	0.144	0.198	0.352	0.333	0.406	0.335	0.119	0.361	0.285
Far North Migrating OR Coastal Falls <sup>4</sup>	Nehalem <sup>3</sup> , Siletz <sup>3</sup> , Sualtan <sup>3</sup>	0.094	0.110	0.505	0.514	0.689	0.672	0.674	0.515	0.078	0.523	0.543

Appendix B.4. ISBM Indices for U.S. fisheries, from the Chinook model (1999-2009) used to establish the AI for each year. Order of the stock groups corresponds to Annex 4, Chapter 3, Attachment IV and V of the PST 1999 Revised Annexes.

Stock Group	Escapement Indicator Stocks	Model Indices										
		1999 CLB0107	2000 CLB0107	2001 CLB0107	2002 CLB0206	2003 CLB0308	2004 CLB0404	2005 CLB0506	2006 CLB0604	2007 CLB0705	2008 CLB0807	2009 CLB0907
Washington Coastal Fall Naturals	Hoko	0.39	0.34	0.56	0.48	0.682	0.966	0.444	0.442	0.401	0.305	0.284
	Grays Harbor	0.44	0.43	0.45	0.84	0.494	0.573	0.222	0.544	0.504	0.450	0.404
	Queets	0.88	0.42	0.44	1.05	1.063	0.932	1.023	1.022	1.014	1.007	0.508
	Hoh	1.39	0.73	0.76	1.26	1.208	1.214	1.499	1.493	1.111	1.457	0.981
	Quillayute	1.14	0.72	0.75	1.31	1.292	1.139	1.133	0.673	0.883	0.851	0.881
Columbia River Falls	Upriver Brights	1.02	1.09	0.99	0.91	1.022	0.906	0.734	0.814	0.726	0.701	0.798
	Deschutes	1.02	0.88	0.74	0.55	0.561	0.475	0.483	0.437	0.493	0.428	0.461
	Lewis <sup>3</sup>	0.11	0.16	1.7	0.93	0.851	1.008	1.058	1.861	1.466	0.436	0.470
Puget Sound Natural Summer / Falls	Skagit	0.17	0.21	0.78	0.27	0.406	0.157	0.195	0.258	0.325	0.321	0.292
	Stillaguamish	0.14	0.14	0.40	0.20	0.184	0.224	0.185	0.493	0.152	0.137	0.446
	Snohomish	0.04	0.05	0.60	0.15	0.072	0.110	0.891	0.199	0.138	0.165	0.202
	Lake Washington	0.50	0.48	0.59	1.25	0.768	0.411	0.373	0.613	0.391	0.392	0.768
	Green R	0.50	0.48	0.60	0.35	0.263	0.260	0.202	0.361	0.278	0.380	0.555
Fraser Late	Harrison River <sup>3</sup>	0.66	0.39	0.62	0.72	0.981	1.058	0.67	0.787	0.563	0.378	0.410
Columbia R Summers	Mid-Columbia Summers <sup>3</sup>	0.11	0.09	0.14	0.82	0.794	0.715	0.545	0.696	0.943	1.254	1.236
Far North Migrating OR Coastal Falls		2.67										
	Nehalem <sup>3</sup>		2.66	2.75	2.61	2.346	2.230	2.09	1.912	2.183	1.968	2.003
	Siletz <sup>3</sup>	1.81	1.79	1.87	1.33	1.302	1.288	1.233	1.237	1.399	1.592	1.217
	Siuslaw <sup>3</sup>	0.94	0.93	0.95	3.34	2.856	2.816	2.643	1.095	1.241	0.971	1.632
North Puget Sound Natural Springs	Nooksack	0.15	0.200	0.01	0	0.121	0.974	0.222	0.121	NA	0.193	0.107
	Skagit	ID	ID	0.07	0.06	0.119	0.663	0.213	0.161	NA	0.214	0.143
Lower Strait of Georgia <sup>4</sup>	Cowichan, Nanaimo	0.17	0.210	0.48	0.22	0.452	0.915	0.407 <sup>B</sup>	0.271	0.288	0.333	0.367
		0.17	0.210	0.48	0.22	0.452	0.915	0.915		0.288	0.333	0.367
Upper Strait of Georgia <sup>4</sup>	Kimakim, Kakweikan, Wakeman, Kingcome, Nimpkish	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Fraser Early (spring and summers) <sup>4</sup>	Upper Fraser, Mid Fraser, Thompson	0.08	0.150	0.70	0.15	0.277	0.839	0.257	0.224	0.219	0.100	0.156
West Coast Vancouver Island Falls <sup>4</sup>	WCVI (Artlsh, Burman, Kauok, Tahsis, Tashish, Marble)	0.264	0.338	0.401	0.202	0.249	0.232	0.304	0.225	0.385	0.365	0.146
North / Central B C	Yakoun, Nass, Skeena, Area 8	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

<sup>1</sup> The CWT-based estimates, not the model estimates, are to be used in postseason assessments

<sup>2</sup> NA means not available because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc)

<sup>3</sup> Stock or stock group with an agreed CTC escapement goal

<sup>4</sup> Stock group not in Annex Attachment IV

<sup>5</sup> Indices for this stock are calculated from CWT recoveries for Cowichan, differences between Nanaimo and Cowichan stock indices are due to differences in terminal harvest

<sup>6</sup> An inconsistency was discovered between the approaches used to calculate the model-based and CWT-based indices. The former included harvest rates for terminal sport while the latter did not. Terminal sport harvest rates are now included in the calculation of both indices. Further review is yet required to determine whether the base period terminal sport harvest rates obtained from analyses of Big Qualicum CWT recoveries adequately represent impacts that would have occurred on Cowichan Chinook.

<sup>7</sup> Several problems have been identified in the approach previously used to calculate the CWT-based indices for Nanaimo Chinook, indices for this stock will not be reported as their utility is questionable.

<sup>8</sup> Although model-based indices were previously calculated separately for Cowichan and Nanaimo Chinook, these did not adequately represent impacts on either LCIS stock. This is because the model-based data represent an aggregate of the two stocks and methods do not currently exist to correctly disaggregate these data for calculation of the ISBM values. Until such methods are developed, a single index value only will be reported representing the aggregate.

<sup>9</sup> The terminal sport harvest rates for Chilliwack Hatchery Chinook, the indicator stock, were removed from the calculation for the Harrison River naturals this year because sport harvest has been essentially zero on the natural population.

<sup>10</sup> A review<sup>11</sup> of the approach used to calculate both the CWT-based and model data-based indices for the WCVI naturals was carried out in 2008. A similar approach was adopted for both indices but due to modifications to the formerly used procedures, the historical time series of values was updated.

<sup>11</sup> For the Canadian ISBM fisheries, both Lake Washington and Green are assumed to have the same distribution and thus the same index value.

<sup>12</sup> ISBM indices for WCVI naturals are based on information from Robertson Cr. hatchery stock, including terminal harvest rates. Prior to this report, harvest rates for terminal net and sport fisheries were treated as equal between the naturals and the hatchery indicator. However, this ignored the fact that since 1999, there has been no terminal net harvest of the vast majority of natural stocks on the WCVI. Consequently, indices for WCVI naturals were adjusted to reflect this zero terminal net harvest rate. In addition, some inconsistencies were noted in the treatment of terminal harvest rates between the model and CWT indices for this stock group. These inconsistencies were eliminated.

## Appendix C.      **Percent distribution of landed catch and total mortality among fisheries and escapement for exploitation rate indicator stocks by calendar year.**

These data result from cohort analysis of CWT recoveries for the indicator stocks; data within a row for each calendar year sum to 100%. Some changes are present in these distribution tables compared to those presented in previous reports. There are various reasons for the changes including updates to escapement time series, in the case of some Columbia River stocks. Also, a computational rule used in producing the stock-specific distribution tables determines whether data are reported for any particular calendar year. The rule is that at least three year classes of CWT recoveries (out of four or five) must be available in any calendar year.

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# Appendix C.1. Percent distribution of Alaska Spring reported catch among fisheries and escapement.

Catch Year	AABM							ISBM													Esc.	
	SEAK		NBC		WCVI			Geo St		Canada		WA/OR coast			Puget Sound		Terminal					
	Trawl	Net	Sport	Trawl	Sport	Trawl	Sport	Trawl	Sport	Trawl	Net	Sport	Trawl	Net	Sport	Net	Sport	Trawl	Net	Sport		
1983	25 1%	1 3%	8 3%	1 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	3 1%	62 2%
1984	21 7%	2 6%	13 0%	0 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 1%	59 4%
1985	23 8%	4 6%	10 9%	1 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 1%	2 2%	56 3%
1986	22 3%	4 3%	11 1%	0 6%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 9%	3 8%	56 8%
1987	27 1%	2 6%	6 7%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 5%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	7 9%	54 6%
1988	27 8%	1 8%	9 6%	1 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	7 2%	52 0%
1989	21 3%	4 7%	8 7%	0 6%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	4 8%	6 0%	53 6%
1990	30 8%	2 4%	9 4%	1 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	10 9%	44 7%
1991	35 4%	3 5%	9 7%	0 6%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	11 9%	38 3%
1992	23 1%	6 6%	11 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	12 3%	46 1%
1993	18 7%	3 5%	11 2%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 3%	9 1%	54 6%
1994	13 9%	12 3%	12 0%	0 4%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	3 7%	4 1%	53 0%
1995	24 8%	5 0%	11 4%	0 3%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	8 9%	8 5%	40 5%
1996	23 3%	4 8%	15 6%	0 0%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	5 4%	15 9%	34 4%
1997	23 8%	4 7%	13 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	3 6%	18 2%	36 5%
1998	25 1%	6 9%	12 9%	0 0%	1 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	3 4%	15 6%	35 2%
1999	19 1%	2 5%	15 0%	0 0%	0 6%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 9%	14 7%	45 1%
2000	21 4%	2 8%	13 0%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 4%	12 6%	47 3%
2001	15 3%	2 3%	9 4%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 0%	9 2%	61 5%
2002	11 1%	1 8%	7 5%	1 0%	0 7%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 1%	8 6%	67 0%
2003	15 4%	1 6%	7 7%	0 7%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	9 8%	64 5%
2004	15 2%	5 0%	5 3%	0 4%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 4%	9 2%	64 0%
2005	22 5%	5 4%	10 9%	0 3%	0 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 1%	19 2%	40 9%
2006	31 8%	3 8%	5 7%	0 6%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 9%	9 6%	46 3%
2007	29 8%	3 2%	6 3%	0 3%	0 6%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 1%	10 0%	48 7%
1983-2007	22 8%	4 0%	10 1%	0 5%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 9%	9 7%	50 5%
1979-1984	23 4%	2 0%	9 6%	1 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 6%	60 8%
1985-1995	24 5%	4 7%	10 2%	0 6%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 0%	7 6%	50 1%
1996-1998	24 1%	5 5%	13 8%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	4 1%	16 6%	35 4%
1999-2007	20 2%	3 2%	9 0%	0 4%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 4%	11 5%	53 9%

**Appendix C.2. Percent distribution of Alaska Spring total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM														Esc.
	Troll	SEAK Net	Sport	Troll	NBC Sport	Troll	WCVI Sport	Troll	Geo St Sport	Troll	Canada Net	Sport	Troll	WVOR coast Net	Sport	Troll	Puget Sound Net	Sport	Troll	Terminal Net	Sport	
1983	32 0%	1 5%	10 5%	1 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 8%	51 2%
1984	26 0%	2 6%	17 2%	1 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 1%	0 0%	0 0%	0 0%	2 0%	50 9%
1985	27 6%	10 1%	12 5%	0 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 9%	2 0%	45 9%
1986	26 1%	10 2%	11 7%	0 5%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 9%	3 5%	47 0%
1987	35 8%	5 2%	6 7%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 5%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	6 9%	44 4%
1988	31 7%	5 7%	9 9%	1 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	6 6%	44 4%
1989	24 8%	12 4%	9 5%	0 6%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	4 3%	5 1%	43 0%
1990	36 4%	6 6%	9 8%	1 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	9 5%	35 6%
1991	36 9%	8 7%	9 7%	0 6%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	10 8%	32 7%
1992	22 4%	20 2%	10 3%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	10 1%	36 2%
1993	22 3%	7 3%	12 2%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 2%	8 4%	47 1%
1994	17 2%	26 5%	11 4%	0 4%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	3 1%	3 2%	37 9%
1995	30 0%	5 9%	12 1%	0 3%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	8 9%	7 7%	34 3%
1996	26 1%	6 3%	16 4%	0 1%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	5 2%	14 8%	30 6%
1997	24 7%	7 6%	14 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	3 5%	17 2%	32 7%
1998	24 7%	16 3%	13 4%	0 0%	1 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	3 2%	13 5%	27 9%
1999	21 2%	4 9%	17 7%	0 0%	0 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	3 2%	13 8%	38 4%
2000	24 6%	5 1%	14 2%	0 0%	0 5%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 9%	12 0%	40 6%
2001	18 0%	4 7%	10 5%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 0%	8 9%	55 6%
2002	12 9%	4 6%	9 2%	1 1%	0 9%	0 1%	0 0%	0 0%	0 0%	0 0%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 4%	8 5%	60 1%
2003	16 8%	4 9%	9 2%	0 7%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	9 7%	58 4%
2004	16 4%	13 7%	6 2%	0 4%	0 6%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 4%	8 5%	53 8%
2005	25 5%	7 2%	13 0%	0 4%	0 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 1%	18 2%	34 9%
2006	34 8%	4 4%	7 2%	0 7%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 0%	9 4%	41 1%
2007	32 5%	7 9%	6 8%	0 3%	0 6%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 3%	9 4%	41 2%
1983-2007	25 9%	8 4%	11 3%	0 6%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 9%	8 9%	42 6%
1979-1984	29 0%	2 0%	13 8%	1 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 4%	51 0%
1985-1995	28 3%	10 8%	10 5%	0 7%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 9%	6 7%	40 8%
1996-1998	25 2%	10 0%	14 6%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	3 9%	15 2%	30 4%
1999-2007	22 5%	6 4%	10 5%	0 4%	0 5%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 6%	10 9%	47 1%



**Appendix C.3. Percent distribution of Kitsumkalum River Summer reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM														Esc
	SEAK		NBC		WCVI			Geo St		Canada		WA/OR coast			Puget Sound		Terminal					
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1984	50.8%	0.0%	0.0%	18.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
1985	26.1%	0.0%	1.6%	7.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	51.6%	
1986	8.9%	0.0%	0.0%	14.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	65.7%	
1987	7.4%	0.0%	0.0%	9.1%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	7.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	71.4%	
1988	17.4%	0.6%	1.9%	3.1%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	23.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%	46.6%	
1989	10.9%	0.3%	6.8%	5.0%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	11.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	59.1%	
1990	10.7%	0.0%	2.8%	6.6%	1.8%	0.0%	0.0%	0.0%	0.0%	0.3%	7.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.6%	65.0%	
1991	14.6%	0.0%	3.7%	8.8%	6.8%	0.0%	0.0%	0.0%	0.0%	0.7%	16.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.8%	41.8%	
1992	13.9%	0.0%	1.9%	7.0%	5.4%	0.4%	0.0%	0.0%	0.0%	0.0%	9.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	60.7%	
1993	10.4%	0.9%	2.2%	10.0%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	18.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	53.5%	
1994	11.1%	0.0%	0.0%	5.6%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	19.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	57.9%	
1995	11.8%	0.0%	2.7%	7.0%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	28.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%	41.9%	
1996	8.3%	0.2%	6.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	18.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.1%	62.0%	
1997	10.2%	0.0%	7.4%	0.0%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%	8.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.1%	61.5%	
1998	8.5%	0.0%	3.0%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	81.0%	
1999	13.9%	0.0%	9.2%	0.0%	10.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	64.4%	
2000	8.5%	0.0%	8.2%	0.0%	5.7%	0.0%	0.0%	0.0%	0.0%	0.6%	6.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	70.0%	
2001	10.2%	0.0%	9.0%	0.6%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	65.9%	
2002	13.2%	0.2%	5.5%	1.5%	11.7%	0.0%	0.0%	0.0%	0.0%	0.5%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	60.5%	
2003	13.7%	0.0%	1.6%	4.9%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0%	69.0%	
2004	8.2%	2.6%	5.5%	0.9%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	74.2%	
2005	13.5%	0.0%	2.3%	2.3%	6.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.2%	62.0%	
2006	12.4%	1.7%	1.7%	2.8%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.9%	62.8%	
2007	10.9%	0.4%	2.5%	1.9%	11.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	70.7%	
1983-2007	13.6%	0.3%	3.6%	4.9%	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%	10.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	59.1%	
1979-1984	50.8%	0.0%	0.0%	18.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
1985-1995	13.0%	0.2%	2.1%	7.6%	3.4%	0.0%	0.0%	0.0%	0.0%	0.1%	14.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	55.9%	
1996-1998	9.0%	0.1%	5.5%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	9.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	68.2%	
1999-2007	11.6%	0.5%	5.0%	1.6%	7.4%	0.0%	0.0%	0.0%	0.0%	0.1%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.4%	66.6%	

# Appendix C.4. Percent distribution of Kitsumkalum River Summer total fishing mortalities among fisheries and escapement.

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WVOR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1984	52.6%	0.0%	0.0%	21.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	26.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	29.6%	0.0%	1.5%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	48.5%
1986	10.2%	0.0%	0.0%	13.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	64.8%
1987	12.8%	0.0%	2.6%	9.8%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	62.3%
1988	23.4%	2.4%	4.9%	7.3%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	18.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	36.6%
1989	14.3%	0.6%	6.9%	5.3%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	10.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	55.5%
1990	11.8%	0.0%	3.3%	7.7%	2.1%	0.0%	0.0%	0.0%	0.0%	0.3%	6.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.8%	62.1%
1991	19.9%	0.0%	4.2%	10.7%	6.5%	0.0%	0.0%	0.0%	0.0%	0.9%	14.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.5%	36.5%
1992	15.4%	0.0%	2.0%	7.9%	5.6%	0.4%	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	58.3%
1993	11.6%	1.7%	2.1%	11.6%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	17.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.8%
1994	13.3%	0.0%	0.0%	6.7%	8.1%	0.0%	0.0%	0.0%	0.0%	0.0%	17.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	54.1%
1995	13.2%	0.0%	2.7%	9.6%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	31.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.1%	35.6%
1996	10.0%	0.2%	6.4%	0.4%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	20.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	57.3%
1997	11.6%	0.0%	8.5%	0.0%	7.2%	0.0%	0.0%	0.0%	0.0%	0.0%	8.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	57.2%
1998	10.3%	0.0%	3.5%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	77.8%
1999	14.9%	0.0%	10.1%	0.0%	12.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	60.7%
2000	10.1%	0.0%	10.7%	0.0%	7.5%	0.0%	0.0%	0.0%	0.6%	0.0%	6.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	64.2%
2001	11.9%	0.0%	9.9%	0.7%	4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	13.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	56.3%
2002	14.2%	0.8%	6.0%	1.6%	13.8%	0.0%	0.0%	0.0%	0.6%	0.0%	4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%	53.9%
2003	15.5%	0.0%	1.9%	5.6%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%	65.3%
2004	8.3%	7.1%	5.6%	0.9%	7.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	67.2%
2005	15.6%	0.0%	2.6%	2.4%	8.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.2%	58.0%
2006	14.0%	1.9%	2.9%	2.9%	7.6%	0.0%	0.0%	0.0%	0.0%	0.0%	5.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.9%	57.8%
2007	10.9%	0.9%	2.6%	1.8%	12.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	68.3%
1983-2007	15.6%	0.6%	4.2%	5.6%	5.6%	0.0%	0.0%	0.0%	0.0%	0.1%	10.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	54.5%
1979-1984	52.6%	0.0%	0.0%	21.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	26.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	16.0%	0.4%	2.8%	8.9%	3.7%	0.0%	0.0%	0.0%	0.0%	0.1%	14.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	51.4%
1996-1998	10.6%	0.1%	6.1%	0.1%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	10.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	64.1%
1999-2007	12.8%	1.2%	5.8%	1.8%	8.9%	0.0%	0.0%	0.0%	0.1%	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.4%	61.3%



# Appendix C.5. Percent distribution of Robertson Creek Fall reported catch among fisheries and escapement.

Catch Year	AABM							ISBM														Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1979	17.9%	0.8%	0.7%	11.5%	0.3%	8.1%	0.1%	0.5%	1.2%	10.9%	10.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	5.1%	32.6%	
1980	26.9%	7.0%	0.9%	8.1%	0.1%	7.0%	0.4%	0.0%	0.1%	8.3%	5.5%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	10.2%	3.0%	22.5%	
1981	29.7%	1.6%	0.8%	12.2%	0.5%	5.3%	0.7%	0.0%	0.6%	8.2%	5.8%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	12.6%	5.0%	16.5%	
1982	25.0%	3.4%	1.5%	13.5%	0.1%	5.8%	0.4%	0.0%	0.9%	7.5%	6.4%	0.0%	0.1%	0.0%	0.0%	0.6%	0.2%	0.0%	13.5%	6.0%	15.3%	
1983	36.0%	3.3%	0.6%	10.4%	0.3%	5.2%	0.0%	0.0%	0.3%	8.0%	3.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	17.5%	4.6%	10.4%	
1984	26.6%	4.0%	0.0%	14.7%	0.0%	6.9%	0.0%	0.0%	0.8%	3.0%	3.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	17.3%	15.9%	7.6%	
1985	14.1%	5.8%	0.0%	17.7%	0.0%	2.0%	0.0%	0.0%	0.8%	0.5%	6.6%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	1.5%	17.7%	31.3%	
1986	13.9%	4.6%	0.0%	8.1%	0.7%	4.4%	0.9%	0.0%	0.0%	1.1%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.4%	25.6%	35.0%	
1987	6.5%	1.5%	0.6%	6.1%	0.5%	2.2%	0.1%	0.0%	0.5%	2.9%	3.5%	0.0%	0.0%	0.0%	0.0%	0.3%	0.1%	0.0%	0.0%	20.8%	54.3%	
1988	9.9%	2.1%	0.9%	6.6%	1.1%	4.1%	4.7%	0.0%	0.6%	1.2%	2.1%	0.0%	0.0%	0.0%	0.0%	0.3%	0.2%	0.0%	7.9%	13.9%	44.4%	
1989	8.0%	2.5%	0.4%	7.8%	1.0%	1.6%	1.7%	0.0%	0.8%	0.8%	2.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	19.3%	16.9%	36.9%	
1990	15.8%	1.1%	1.3%	7.3%	0.9%	6.3%	2.0%	0.0%	0.3%	2.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	9.8%	8.8%	41.9%	
1991	16.9%	1.1%	3.0%	9.1%	0.8%	4.5%	1.1%	0.0%	0.3%	2.7%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	14.3%	12.6%	32.3%	
1992	13.7%	3.0%	1.7%	7.2%	1.5%	18.8%	2.1%	0.0%	0.1%	3.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.4%	5.9%	41.1%	
1993	13.9%	1.0%	2.5%	7.1%	1.4%	13.8%	2.6%	0.0%	0.5%	2.0%	1.2%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	7.5%	13.1%	33.2%	
1994	15.8%	2.2%	3.7%	9.5%	1.1%	5.3%	4.3%	0.0%	0.4%	1.1%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	12.6%	17.0%	25.8%	
1995	15.1%	0.0%	4.0%	3.0%	2.0%	1.5%	3.1%	0.0%	1.4%	0.3%	0.4%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	7.1%	9.2%	52.6%	
1996	5.6%	0.1%	1.9%	0.0%	2.8%	0.0%	0.0%	0.0%	1.5%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	87.4%	
1997	10.7%	3.2%	3.9%	4.5%	3.3%	0.1%	2.1%	0.0%	0.5%	1.8%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	6.5%	17.8%	44.9%	
1998	16.3%	1.2%	5.0%	6.1%	3.1%	0.0%	3.3%	0.0%	0.6%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	4.1%	15.6%	44.6%	
1999	11.8%	0.4%	7.7%	3.2%	6.1%	0.0%	3.3%	0.0%	0.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	18.3%	41.5%	
2000	5.3%	0.0%	0.0%	0.0%	9.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	84.1%	
2001	3.0%	0.0%	1.6%	0.0%	0.4%	0.0%	2.1%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	80.2%	
2002	11.1%	0.3%	1.5%	3.4%	4.1%	0.4%	2.9%	0.0%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.7%	15.0%	53.0%	
2003	12.5%	1.9%	3.0%	0.7%	4.3%	0.0%	1.7%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.8%	14.2%	52.8%	
2004	11.8%	7.5%	2.6%	2.4%	4.8%	0.2%	1.3%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	12.5%	12.5%	43.1%	
2005	13.8%	2.5%	3.6%	2.8%	8.9%	0.0%	1.7%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	32.0%	8.1%	25.9%	
2006	9.8%	1.9%	2.4%	2.4%	5.4%	0.0%	3.4%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	26.6%	11.0%	35.7%	
2007	14.9%	1.6%	3.3%	5.0%	10.1%	0.1%	3.9%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	26.9%	12.1%	21.2%	
1983-2007	14.9%	2.3%	2.0%	6.6%	2.6%	3.6%	1.7%	0.0%	0.7%	2.3%	2.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	9.8%	11.3%	39.9%	
1979-1984	27.0%	3.3%	0.7%	11.7%	0.2%	6.4%	0.3%	0.1%	0.6%	7.7%	5.7%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	11.8%	6.6%	17.5%	
1985-1995	13.1%	2.3%	1.6%	8.1%	1.0%	5.9%	2.1%	0.0%	0.5%	1.6%	2.4%	0.0%	0.0%	0.0%	0.0%	0.3%	0.2%	0.0%	7.4%	14.7%	39.0%	
1996-1998	10.8%	1.5%	3.6%	3.5%	3.0%	0.0%	1.8%	0.0%	0.9%	0.9%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	11.2%	59.0%	
1999-2007	10.4%	1.8%	2.9%	2.2%	5.9%	0.1%	2.3%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.5%	10.3%	49.6%	

Appendix C.6. Percent distribution of Robertson Creek Fall total fishing mortalities among fisheries and escapement.

Catch Year	AABM							ISBM														Esc.
	SEAK		NBC		WCVI			Geo St		Canada			WAVOR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1979	20.7%	0.7%	0.7%	12.8%	0.3%	9.0%	0.1%	0.5%	1.1%	12.0%	9.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	4.7%	28.1%	
1980	27.7%	6.9%	1.0%	8.6%	0.1%	7.5%	0.4%	0.0%	0.1%	8.7%	5.4%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	9.6%	3.0%	20.6%	
1981	32.9%	1.5%	1.0%	13.1%	0.5%	5.8%	0.6%	0.0%	0.6%	8.9%	5.2%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	11.1%	4.6%	13.7%	
1982	28.5%	3.1%	1.6%	14.2%	0.1%	6.1%	0.4%	0.0%	0.8%	7.8%	5.8%	0.0%	0.1%	0.0%	0.0%	0.6%	0.2%	0.0%	12.0%	5.6%	13.0%	
1983	40.6%	3.0%	0.6%	10.1%	0.3%	5.0%	0.0%	0.0%	0.3%	7.7%	2.8%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	15.9%	4.4%	9.2%	
1984	27.9%	3.8%	0.0%	14.7%	0.0%	7.1%	0.0%	0.0%	0.8%	3.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	16.4%	15.9%	7.1%	
1985	14.9%	16.8%	0.0%	16.0%	0.0%	1.8%	0.0%	0.0%	0.7%	0.4%	5.5%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	1.2%	15.4%	25.4%	
1986	17.8%	12.6%	0.0%	8.6%	1.1%	4.4%	0.8%	0.0%	0.0%	1.2%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	0.3%	21.3%	26.2%	
1987	10.2%	3.4%	1.1%	7.5%	0.6%	2.7%	0.2%	0.0%	0.5%	3.5%	3.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.1%	0.0%	0.0%	19.6%	47.1%	
1988	11.0%	4.7%	1.2%	7.3%	1.1%	4.7%	4.8%	0.0%	0.7%	1.3%	2.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.2%	0.0%	7.4%	13.5%	39.7%	
1989	11.0%	6.9%	0.5%	9.0%	1.0%	1.9%	1.6%	0.0%	0.8%	1.0%	2.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	17.2%	15.6%	31.0%	
1990	19.5%	2.9%	1.5%	8.8%	0.9%	6.7%	1.9%	0.0%	0.3%	2.3%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	8.8%	8.1%	35.9%	
1991	20.0%	2.4%	3.1%	9.8%	0.8%	4.8%	1.0%	0.0%	0.3%	2.9%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	13.0%	12.0%	28.5%	
1992	16.8%	8.3%	1.7%	7.4%	1.4%	18.6%	1.9%	0.0%	0.1%	3.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.3%	5.2%	34.0%	
1993	16.0%	2.3%	2.5%	7.6%	1.4%	14.5%	2.5%	0.0%	0.5%	2.1%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	6.9%	12.6%	29.6%	
1994	18.1%	4.9%	3.6%	9.2%	1.1%	5.2%	4.2%	0.0%	0.4%	1.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	11.5%	16.4%	23.1%	
1995	17.3%	0.0%	4.5%	3.6%	2.5%	1.9%	3.2%	0.0%	1.5%	0.4%	0.6%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	6.6%	9.9%	46.0%	
1996	9.3%	0.1%	4.5%	2.8%	2.4%	0.8%	0.0%	0.0%	1.8%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	75.4%	
1997	13.7%	8.2%	4.4%	5.0%	3.6%	0.2%	1.9%	0.0%	0.6%	2.0%	0.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	5.8%	16.1%	37.6%	
1998	16.8%	3.0%	5.0%	6.1%	3.6%	0.0%	3.3%	0.0%	0.6%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	3.9%	15.7%	41.6%	
1999	12.4%	0.8%	7.8%	3.2%	6.9%	0.0%	3.4%	0.0%	0.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.5%	18.6%	39.3%	
2000	6.1%	0.0%	0.0%	0.0%	14.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	78.0%	
2001	4.4%	0.0%	3.0%	0.0%	0.6%	0.0%	2.4%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	84.9%	
2002	13.0%	0.7%	1.9%	3.8%	4.9%	0.4%	3.1%	0.0%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.2%	15.7%	46.4%	
2003	13.5%	5.3%	3.4%	0.7%	5.1%	0.0%	2.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.1%	14.8%	46.6%	
2004	11.6%	20.3%	2.5%	2.3%	5.3%	0.1%	1.2%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	10.2%	11.5%	33.7%	
2005	14.9%	2.9%	4.1%	3.0%	10.9%	0.0%	1.8%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	29.9%	8.2%	23.6%	
2006	11.5%	3.3%	2.6%	2.6%	5.8%	0.0%	3.5%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.2%	11.1%	32.7%	
2007	16.2%	3.2%	3.4%	5.0%	11.5%	0.1%	4.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	24.7%	12.0%	19.1%	
1983-2007	17.0%	4.6%	2.3%	7.0%	3.0%	3.8%	1.7%	0.0%	0.8%	2.4%	1.9%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	9.0%	10.9%	35.2%	
1979-1984	29.7%	3.2%	0.8%	12.3%	0.2%	6.8%	0.3%	0.1%	0.6%	8.0%	5.2%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	10.8%	6.3%	15.3%	
1985-1995	15.7%	5.9%	1.8%	8.6%	1.1%	6.1%	2.0%	0.0%	0.5%	1.7%	2.2%	0.0%	0.0%	0.0%	0.0%	0.3%	0.2%	0.0%	6.7%	13.6%	33.5%	
1996-1998	13.3%	3.8%	4.6%	4.6%	3.2%	0.3%	1.7%	0.0%	1.0%	0.9%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	11.3%	51.7%	
1996-2007	11.5%	4.1%	3.2%	2.3%	7.2%	0.1%	2.4%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.4%	10.4%	45.2%	

**Appendix C.7. Percent distribution of Quinsam River Fall reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1979	4.7%	5.0%	0.7%	5.3%	3.0%	0.0%	0.0%	2.5%	4.2%	10.0%	23.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	41.5%
1980	14.6%	5.0%	2.9%	10.4%	5.2%	0.0%	0.0%	1.6%	5.2%	16.3%	21.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.4%
1981	11.0%	2.4%	1.6%	12.8%	6.5%	0.6%	0.0%	2.1%	9.9%	12.3%	17.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	23.7%
1982	16.2%	7.0%	5.0%	8.3%	2.2%	0.4%	0.0%	0.0%	3.8%	6.3%	26.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	24.2%
1983	21.1%	1.6%	0.3%	14.5%	2.7%	0.7%	0.0%	0.3%	4.5%	11.5%	25.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.5%
1984	14.2%	5.9%	4.6%	6.3%	4.0%	0.8%	0.0%	0.9%	6.8%	4.9%	21.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.4%
1985	25.7%	5.7%	4.3%	5.1%	1.0%	0.1%	0.0%	0.0%	4.1%	3.6%	19.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	30.9%
1986	13.8%	4.3%	2.8%	6.6%	2.9%	0.0%	0.0%	0.1%	6.1%	7.2%	26.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.0%
1987	10.7%	3.6%	2.8%	6.3%	6.5%	0.4%	0.4%	0.2%	3.9%	6.1%	24.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	34.8%
1988	18.6%	1.8%	1.2%	6.5%	2.8%	0.7%	0.9%	0.2%	3.5%	2.4%	9.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	51.7%
1989	12.6%	2.8%	2.8%	3.9%	3.2%	0.3%	0.0%	0.0%	7.3%	1.9%	17.9%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	47.1%
1990	16.0%	2.0%	0.5%	6.2%	8.3%	1.3%	0.0%	1.6%	1.8%	4.6%	14.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	43.0%
1991	10.5%	2.8%	1.4%	5.8%	12.3%	0.5%	0.8%	0.6%	3.9%	9.3%	14.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	37.8%
1992	12.0%	0.5%	2.5%	10.5%	6.5%	0.3%	0.0%	0.3%	3.3%	9.7%	10.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	43.9%
1993	7.8%	3.3%	1.2%	5.7%	8.7%	1.2%	0.0%	0.6%	9.9%	5.7%	22.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.5%
1994	5.3%	6.0%	4.0%	9.3%	5.0%	0.0%	0.0%	0.0%	6.0%	1.3%	17.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	45.4%
1995	7.0%	4.5%	0.0%	9.1%	9.5%	0.0%	0.0%	0.0%	6.6%	0.0%	15.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	47.9%
1996	6.4%	0.4%	0.0%	0.0%	4.5%	0.0%	0.0%	0.0%	6.0%	0.0%	17.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	64.9%
1997	9.0%	3.2%	2.5%	4.1%	9.0%	0.7%	5.1%	0.0%	8.7%	3.4%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	51.7%
1998	13.8%	2.2%	2.0%	0.0%	9.1%	0.0%	0.0%	0.0%	5.4%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	66.8%
1999	8.6%	3.4%	4.2%	1.3%	11.9%	0.0%	0.0%	0.0%	1.6%	0.2%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	67.3%
2000	12.8%	2.2%	4.9%	0.3%	5.5%	0.0%	0.0%	0.0%	2.8%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	71.1%
2001	9.6%	1.4%	1.8%	0.1%	5.4%	0.0%	0.0%	0.0%	1.7%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	79.9%
2002	14.1%	3.0%	0.9%	0.5%	15.3%	0.0%	0.0%	0.0%	2.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	63.9%
2003	17.5%	1.6%	0.8%	0.0%	20.8%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	58.8%
2004	8.5%	13.9%	1.7%	0.3%	16.1%	0.0%	0.0%	0.0%	0.7%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	57.9%
2005	17.1%	2.8%	2.8%	0.3%	14.8%	0.0%	0.0%	0.0%	1.3%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	59.8%
2006	16.1%	4.7%	1.1%	0.6%	7.5%	0.0%	0.6%	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	65.3%
2007	18.8%	2.7%	1.0%	4.4%	15.0%	0.0%	0.0%	0.0%	5.7%	0.2%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	51.5%
1983-2007	12.9%	3.6%	2.1%	5.0%	7.8%	0.3%	0.3%	0.4%	4.5%	4.0%	12.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	46.9%
1979-1984	13.6%	4.5%	2.5%	9.6%	3.9%	0.4%	0.0%	1.2%	5.7%	10.2%	22.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.8%
1985-1995	12.7%	3.4%	2.1%	6.8%	6.1%	0.4%	0.2%	0.3%	5.1%	4.7%	17.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	40.6%
1996-1998	9.7%	1.9%	1.5%	1.4%	7.5%	0.2%	1.7%	0.0%	6.7%	1.1%	6.9%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	61.2%
1999-2007	13.7%	4.0%	2.1%	0.9%	12.5%	0.0%	0.1%	0.0%	2.3%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	64.0%

**Appendix C.8. Percent distribution of Quinsam River Fall total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo St		Canada		WJAOR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1979	6.4%	4.9%	1.0%	6.6%	3.0%	0.1%	0.0%	2.3%	4.1%	11.6%	22.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	37.6%
1980	15.2%	4.8%	3.2%	10.9%	5.1%	0.0%	0.0%	1.5%	5.1%	17.2%	21.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.8%
1981	11.6%	2.3%	1.6%	13.6%	6.6%	0.6%	0.0%	2.1%	9.6%	13.0%	16.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	21.8%
1982	19.9%	6.8%	5.4%	8.7%	2.2%	0.4%	0.0%	0.0%	3.6%	6.6%	25.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	21.1%
1983	25.1%	1.4%	0.3%	14.4%	2.9%	0.7%	0.0%	0.2%	4.1%	11.5%	24.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.0%
1984	15.5%	5.9%	5.4%	6.6%	4.1%	0.9%	0.0%	0.9%	6.7%	5.1%	20.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.2%
1985	27.2%	12.7%	4.2%	4.7%	1.0%	0.1%	0.0%	0.0%	3.7%	3.3%	17.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	25.9%
1986	15.4%	10.8%	3.1%	6.6%	3.0%	0.0%	0.0%	0.2%	5.3%	7.2%	24.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	24.2%
1987	15.9%	10.4%	2.7%	6.6%	5.6%	0.4%	0.3%	0.2%	3.2%	6.7%	20.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	27.5%
1988	19.7%	4.4%	1.3%	6.9%	3.0%	0.8%	0.9%	0.2%	3.7%	2.6%	9.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	47.1%
1989	14.1%	8.1%	2.8%	4.0%	3.2%	0.3%	0.0%	0.0%	7.6%	2.0%	16.4%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	41.3%
1990	17.5%	5.1%	0.5%	6.9%	8.3%	1.4%	0.0%	1.6%	1.9%	5.0%	13.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	37.9%
1991	11.7%	8.0%	1.5%	6.1%	11.6%	0.6%	0.7%	0.7%	3.9%	9.7%	12.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	32.9%
1992	16.3%	1.2%	2.6%	11.1%	6.6%	0.3%	0.0%	0.4%	3.4%	9.9%	9.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	38.3%
1993	8.7%	7.2%	1.3%	6.4%	8.4%	1.3%	0.0%	0.6%	10.5%	6.4%	20.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.6%
1994	6.8%	12.7%	4.0%	9.6%	4.8%	0.0%	0.0%	0.0%	6.2%	1.4%	15.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	38.7%
1995	8.5%	5.1%	0.0%	11.2%	10.5%	0.0%	0.0%	0.0%	6.5%	0.0%	18.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	39.5%
1996	7.2%	0.7%	0.0%	1.4%	4.4%	0.0%	0.0%	0.0%	6.8%	0.0%	20.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	58.7%
1997	9.9%	5.9%	3.0%	4.3%	10.7%	0.6%	4.7%	0.0%	9.1%	3.6%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	44.4%
1998	14.7%	6.3%	2.2%	0.0%	11.1%	0.0%	0.0%	0.0%	5.6%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	58.9%
1999	9.9%	7.2%	5.2%	1.4%	13.5%	0.0%	0.0%	0.0%	1.7%	0.2%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	59.2%
2000	14.3%	3.7%	5.5%	0.2%	6.6%	0.0%	0.0%	0.0%	3.1%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	64.7%
2001	10.7%	2.6%	2.0%	0.1%	6.7%	0.0%	0.0%	0.0%	1.6%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	75.3%
2002	14.4%	6.6%	0.9%	0.6%	17.8%	0.0%	0.0%	0.0%	2.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	57.3%
2003	19.1%	5.6%	0.9%	0.0%	24.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.1%
2004	6.9%	34.6%	1.4%	0.2%	15.7%	0.0%	0.0%	0.0%	0.6%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	39.5%
2005	18.2%	3.2%	3.1%	0.4%	17.7%	0.0%	0.0%	0.0%	1.4%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	54.9%
2006	17.7%	5.9%	1.3%	0.7%	8.4%	0.0%	0.7%	0.0%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	60.9%
2007	16.5%	6.3%	0.9%	4.1%	15.3%	0.0%	0.0%	0.0%	5.6%	5.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	43.5%
1983-2007	14.4%	6.9%	2.3%	5.3%	8.3%	0.3%	0.3%	0.4%	4.6%	4.4%	11.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	41.0%
1979-1984	15.6%	4.4%	2.6%	10.2%	4.0%	0.4%	0.0%	1.2%	5.6%	10.6%	21.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	23.3%
1985-1995	14.7%	7.6%	2.2%	7.3%	6.0%	0.5%	0.2%	0.4%	5.1%	4.9%	16.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	34.7%
1996-1998	10.6%	4.3%	1.7%	1.9%	8.7%	0.3%	1.6%	0.0%	7.2%	1.2%	8.3%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	54.0%
1999-2007	14.4%	8.4%	2.3%	0.9%	14.0%	0.0%	0.1%	0.0%	2.3%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	56.1%



**Appendix C.9. Percent distribution of Puntledge River Summer reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo St		Canada		WA/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1979	1 5%	0 3%	0 2%	2 5%	0 3%	0 7%	0 0%	19 9%	16 9%	8 0%	12 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	37 0%
1980	2 4%	0 0%	0 4%	2 0%	1 3%	5 3%	0 0%	16 2%	23 1%	5 8%	10 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	33 5%
1981	0 8%	0 0%	0 0%	4 4%	4 0%	0 0%	0 0%	22 0%	37 6%	7 3%	8 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	15 0%
1982	0 8%	0 4%	0 0%	3 7%	1 2%	1 8%	0 0%	5 5%	16 2%	14 4%	22 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	33 3%
1983	1 0%	0 2%	0 0%	7 8%	3 1%	2 5%	0 0%	12 7%	13 3%	16 2%	8 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	35 2%
1984	0 0%	1 0%	0 0%	2 0%	1 0%	2 0%	0 0%	5 3%	17 7%	5 0%	5 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	60 3%
1985	10 5%	0 8%	2 3%	6 0%	6 0%	0 0%	0 0%	0 0%	32 3%	1 5%	14 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	26 3%
1986	5 6%	0 0%	4 4%	2 8%	0 0%	2 8%	0 0%	10 6%	32 2%	3 9%	11 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	26 1%
1987	2 7%	0 7%	0 0%	12 2%	10 1%	0 0%	4 7%	0 0%	16 9%	2 0%	6 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	43 9%
1988	12 0%	0 0%	0 0%	0 0%	14 1%	0 0%	0 0%	0 0%	17 4%	0 0%	5 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	51 1%
1989	3 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	48 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	48 4%
1990	8 3%	0 0%	0 0%	0 0%	4 2%	0 0%	0 0%	0 0%	8 3%	3 1%	14 6%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	61 5%
1991	6 2%	6 2%	0 0%	0 0%	9 3%	0 0%	0 0%	0 0%	26 8%	0 0%	11 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	40 2%
1992	0 0%	0 0%	0 0%	0 0%	3 4%	0 0%	0 0%	3 4%	33 3%	0 0%	21 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	37 9%
1993	0 0%	0 0%	0 0%	0 0%	11 4%	0 0%	0 0%	0 0%	48 6%	0 0%	7 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	32 9%
1994	7 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	53 6%	0 0%	10 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	28 6%
1995	5 6%	2 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	30 6%	0 0%	13 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	47 2%
1996	0 0%	0 0%	0 0%	0 0%	6 7%	0 0%	0 0%	0 0%	28 9%	0 0%	2 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	62 2%
1997	0 0%	0 0%	0 0%	0 0%	13 8%	0 0%	0 0%	0 0%	6 9%	0 0%	6 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	72 4%
1998	0 0%	0 0%	0 0%	0 0%	83 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	16 7%
1999	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	10 4%	0 0%	6 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	83 3%
2000	0 0%	1 6%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	9 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	88 5%
2001	2 7%	0 9%	0 0%	0 0%	3 7%	2 3%	0 0%	0 0%	2 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	87 7%
2002	4 5%	0 0%	0 0%	0 0%	8 9%	0 0%	9 8%	0 0%	3 6%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	73 2%
2003	0 0%	0 0%	0 0%	0 0%	14 8%	0 0%	0 0%	0 0%	4 3%	0 0%	0 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	80 0%
2004	14 3%	1 0%	0 0%	0 0%	0 0%	3 1%	0 0%	0 0%	8 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	73 5%
2005	1 7%	0 0%	0 0%	1 3%	7 3%	0 7%	0 0%	0 0%	12 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	77 0%
2006	6 7%	8 9%	0 0%	0 9%	3 6%	0 0%	1 8%	0 0%	2 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	75 9%
2007	20 0%	5 6%	1 9%	1 9%	6 3%	0 0%	0 0%	0 0%	1 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	62 5%
1983-2007	4 1%	1 0%	0 3%	1 6%	7 5%	0 7%	0 6%	3 3%	19 5%	2 3%	7 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	52 1%
1979-1984	1 1%	0 3%	0 1%	3 7%	1 8%	2 0%	0 0%	13 6%	20 8%	9 5%	11 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	35 8%
1985-1995	5 6%	0 9%	0 6%	1 9%	5 3%	0 3%	0 4%	1 3%	31 7%	1 0%	10 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	40 4%
1996-1998	0 0%	0 0%	0 0%	0 0%	34 6%	0 0%	0 0%	0 0%	11 9%	0 0%	3 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	50 4%
1999-2007	5 5%	2 0%	0 2%	0 5%	4 9%	0 7%	1 3%	0 0%	6 1%	0 0%	0 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	78 0%

# Appendix C.10. Percent distribution of Puntledge River Summer total fishing mortalities among fisheries and escapement.

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1979	1 9%	0 3%	0 3%	2 8%	0 3%	1 2%	0 0%	19 6%	17 1%	9 1%	12 5%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	35 1%
1980	2 8%	0 0%	0 5%	2 3%	1 3%	6 1%	0 0%	16 2%	22 9%	6 6%	10 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	31 0%
1981	0 9%	0 0%	0 0%	5 3%	4 0%	0 0%	0 0%	21 4%	37 3%	8 6%	8 6%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	13 9%
1982	1 1%	0 5%	0 0%	4 2%	1 4%	2 1%	0 0%	5 7%	15 7%	16 4%	23 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	29 9%
1983	2 1%	0 2%	0 0%	8 3%	3 2%	2 6%	0 0%	12 8%	13 2%	17 3%	7 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	32 4%
1984	0 0%	1 0%	0 0%	2 2%	1 3%	2 2%	0 0%	5 7%	18 2%	5 7%	6 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	57 6%
1985	14 7%	1 3%	3 8%	6 4%	6 4%	0 0%	0 0%	0 0%	30 1%	1 3%	13 5%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	22 4%
1986	6 0%	0 0%	5 5%	3 0%	0 0%	3 0%	0 0%	12 4%	30 8%	4 5%	11 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	23 4%
1987	3 1%	1 2%	0 0%	15 3%	10 4%	0 0%	4 3%	0 0%	16 6%	3 1%	6 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	39 9%
1988	11 9%	0 0%	0 0%	0 0%	15 8%	0 0%	0 0%	0 0%	19 8%	0 0%	5 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	46 5%
1989	2 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	54 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	42 3%
1990	9 8%	0 0%	0 0%	0 0%	3 9%	0 0%	0 0%	0 0%	8 8%	3 9%	15 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	57 8%
1991	6 3%	15 7%	0 0%	0 0%	9 4%	0 0%	0 0%	0 0%	27 6%	0 0%	10 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	30 7%
1992	0 0%	0 0%	0 0%	0 0%	3 1%	0 0%	0 0%	4 1%	38 8%	0 0%	20 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	33 7%
1993	0 0%	0 0%	0 0%	0 0%	11 4%	0 0%	0 0%	0 0%	53 2%	0 0%	6 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	29 1%
1994	9 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	56 3%	0 0%	9 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	25 0%
1995	4 9%	2 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	34 1%	0 0%	17 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	41 5%
1996	0 0%	0 0%	0 0%	0 0%	6 1%	0 0%	0 0%	0 0%	34 7%	0 0%	2 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	57 1%
1997	0 0%	0 0%	0 0%	0 0%	16 7%	0 0%	0 0%	0 0%	6 7%	0 0%	6 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	70 0%
1998	0 0%	0 0%	0 0%	0 0%	77 8%	0 0%	0 0%	0 0%	11 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	11 1%
1999	0 0%	0 0%	0 0%	0 0%	1 9%	0 0%	0 0%	0 0%	13 5%	0 0%	7 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	76 9%
2000	1 6%	3 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	10 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	84 4%
2001	3 1%	1 8%	0 0%	0 0%	4 9%	2 2%	0 0%	0 0%	3 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	85 0%
2002	5 7%	0 0%	0 0%	0 0%	11 5%	0 0%	11 5%	0 0%	4 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	67 2%
2003	0 0%	0 0%	0 0%	0 0%	18 0%	0 0%	0 0%	0 0%	5 7%	0 0%	0 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	75 4%
2004	16 8%	2 8%	0 0%	0 0%	0 0%	2 8%	0 0%	0 0%	10 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	67 3%
2005	1 9%	0 0%	0 0%	1 6%	9 4%	0 6%	0 0%	0 0%	14 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	72 2%
2006	9 1%	14 2%	0 0%	1 2%	3 9%	0 0%	2 0%	0 0%	2 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	66 9%
2007	20 4%	12 0%	3 1%	2 1%	8 4%	0 0%	0 0%	0 0%	1 6%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	52 4%
1983-2007	4 7%	1 9%	0 5%	1 9%	8 0%	0 8%	0 6%	3 4%	21 2%	2 6%	7 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	47 5%
1979-1984	1 5%	0 3%	0 1%	4 2%	1 9%	2 4%	0 0%	13 6%	20 7%	10 6%	11 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	33 3%
1985-1995	6 3%	1 9%	0 8%	2 2%	5 5%	0 3%	0 4%	1 5%	33 7%	1 2%	10 6%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	35 7%
1996-1998	0 0%	0 0%	0 0%	0 0%	33 5%	0 0%	0 0%	0 0%	17 5%	0 0%	2 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	46 1%
1999-2007	6 5%	3 8%	0 3%	0 5%	6 4%	0 6%	1 5%	0 0%	7 4%	0 0%	0 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	72 0%



**Appendix C.11. Percent distribution of Big Qualicum reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1979	3.4%	0.9%	0.3%	1.7%	0.4%	2.2%	0.1%	21.2%	15.3%	9.4%	12.1%	0.0%	0.0%	0.0%	0.1%	0.3%	0.0%	0.0%	0.0%	2.8%	29.9%
1980	1.4%	1.6%	0.4%	4.4%	1.4%	4.2%	0.0%	15.2%	20.1%	6.6%	12.8%	0.0%	0.1%	0.0%	0.0%	0.3%	0.2%	0.0%	0.0%	3.7%	27.7%
1981	1.9%	0.3%	0.4%	1.3%	0.8%	1.5%	0.3%	17.8%	33.4%	11.4%	14.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.6%	0.0%	0.0%	4.1%	12.1%
1982	4.5%	0.4%	1.2%	4.5%	0.4%	4.3%	0.0%	12.7%	11.4%	5.8%	20.5%	0.0%	0.0%	0.0%	0.0%	1.1%	0.7%	0.0%	0.0%	1.6%	30.9%
1983	5.4%	0.3%	0.3%	4.9%	1.0%	1.1%	0.0%	13.5%	14.8%	6.8%	19.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	8.3%	23.7%
1984	1.4%	0.4%	0.0%	1.4%	5.8%	1.4%	0.0%	8.9%	38.8%	6.6%	9.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.6%	20.7%
1985	3.9%	0.3%	0.0%	1.7%	1.7%	1.4%	0.0%	1.7%	24.3%	3.8%	19.3%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	9.7%	29.4%
1986	1.9%	0.2%	0.0%	0.7%	2.8%	1.4%	0.0%	8.1%	30.8%	12.6%	15.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.7%	20.1%
1987	8.7%	0.0%	0.9%	3.9%	2.7%	4.2%	0.0%	2.0%	22.6%	2.4%	7.7%	0.0%	0.8%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	6.6%	36.6%
1988	2.8%	0.5%	0.0%	2.3%	1.3%	2.8%	2.0%	1.8%	25.3%	1.3%	14.9%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	5.1%	39.0%
1989	4.2%	1.6%	0.6%	3.2%	1.8%	4.8%	0.0%	1.8%	19.4%	0.6%	9.2%	0.0%	0.2%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	18.0%	33.7%
1990	4.8%	1.9%	0.0%	6.0%	2.4%	3.0%	0.0%	3.5%	14.6%	1.6%	17.7%	0.0%	0.2%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	4.6%	37.9%
1991	2.4%	1.3%	0.0%	2.1%	1.9%	1.9%	0.0%	5.3%	28.2%	1.1%	8.5%	0.0%	0.5%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	10.9%	35.4%
1992	2.3%	0.0%	2.5%	5.4%	7.7%	3.4%	0.0%	9.0%	26.3%	5.9%	5.6%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	5.9%	25.6%
1993	1.2%	1.2%	0.0%	1.5%	3.2%	1.7%	0.0%	3.4%	36.9%	3.9%	9.8%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	4.6%	31.5%
1994	4.4%	0.0%	0.0%	1.6%	2.0%	2.8%	0.0%	4.4%	23.4%	1.6%	6.0%	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	0.0%	0.0%	6.0%	45.2%
1995	7.0%	0.0%	0.0%	1.5%	2.5%	0.0%	0.0%	0.0%	10.9%	0.0%	7.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%	60.7%
1996	2.9%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	44.3%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	2.1%	47.9%
1997	3.0%	0.0%	0.0%	5.0%	2.0%	0.0%	4.5%	1.0%	9.0%	1.5%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.4%	51.7%
1998	7.0%	0.5%	0.0%	0.0%	5.9%	0.0%	0.0%	0.0%	10.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.6%	67.0%
1999	5.5%	2.4%	0.0%	2.0%	3.5%	0.0%	3.5%	0.0%	9.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	2.4%	68.6%
2000	13.8%	0.9%	0.0%	0.0%	3.6%	0.0%	0.0%	0.0%	7.6%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	3.6%	67.1%
2001	4.1%	6.8%	0.0%	0.0%	10.7%	0.6%	0.0%	0.0%	8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	2.1%	65.6%
2002	9.8%	0.0%	2.9%	3.3%	9.4%	2.3%	2.9%	0.0%	5.5%	0.0%	0.3%	0.0%	0.0%	0.0%	1.0%	2.0%	0.0%	0.0%	0.0%	3.3%	57.3%
2003	7.7%	0.4%	1.6%	0.0%	13.3%	3.2%	0.0%	0.0%	8.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	65.3%
2004	6.9%	0.0%	0.3%	4.8%	4.8%	1.3%	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.5%	72.0%
2005	8.9%	0.4%	0.0%	2.0%	9.3%	5.8%	2.8%	0.0%	6.0%	0.0%	0.8%	0.0%	0.6%	0.0%	0.6%	3.0%	0.0%	0.0%	0.0%	1.4%	58.5%
2006	4.2%	1.2%	1.7%	1.4%	3.6%	0.5%	0.0%	0.0%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%	2.9%	79.9%
2007	10.1%	0.2%	0.7%	5.9%	12.4%	0.5%	1.8%	0.0%	4.7%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	4.5%	57.9%
1983-2007	5.0%	0.8%	0.5%	2.5%	4.1%	1.9%	0.6%	4.5%	18.0%	2.9%	7.4%	0.0%	0.1%	0.0%	0.1%	0.8%	0.2%	0.0%	0.0%	5.7%	44.8%
1979-1984	3.0%	0.7%	0.4%	3.0%	1.6%	2.5%	0.1%	14.9%	22.3%	7.8%	14.8%	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	4.2%	24.2%
1985-1995	4.0%	0.6%	0.4%	2.7%	2.7%	2.5%	0.2%	3.7%	23.9%	3.2%	11.1%	0.0%	0.2%	0.0%	0.0%	0.7%	0.4%	0.0%	0.0%	7.9%	35.9%
1996-1998	4.3%	0.2%	0.0%	1.7%	3.0%	0.0%	1.5%	0.3%	21.4%	0.5%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	10.4%	55.5%
1999-2007	7.9%	1.4%	0.8%	2.1%	7.9%	1.6%	1.2%	0.0%	6.8%	0.3%	0.2%	0.0%	0.1%	0.0%	0.2%	1.4%	0.0%	0.0%	0.0%	2.3%	65.8%

**Appendix C.12. Percent distribution of Big Qualicum total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM														Esc.
	SEAK		NBC		WCVI			Geo St		Canada		WA/OR coast			Puget Sound		Terminal					
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1979	4.3%	0.9%	0.4%	2.2%	0.4%	2.8%	0.1%	20.4%	14.9%	11.7%	11.6%	0.0%	0.0%	0.0%	0.1%	0.3%	0.0%	0.0%	0.0%	2.7%	27.2%	
1980	1.6%	1.7%	0.4%	5.0%	1.3%	5.0%	0.0%	15.0%	19.9%	7.6%	12.7%	0.0%	0.2%	0.0%	0.0%	0.3%	0.2%	0.0%	0.0%	3.6%	25.6%	
1981	2.4%	0.3%	0.4%	1.6%	0.8%	1.8%	0.3%	17.2%	32.5%	13.2%	13.7%	0.0%	0.0%	0.0%	0.0%	0.2%	0.6%	0.0%	0.0%	3.9%	11.0%	
1982	5.6%	0.5%	1.4%	4.9%	0.4%	4.9%	0.0%	12.4%	11.3%	6.4%	20.2%	0.0%	0.0%	0.0%	0.0%	1.1%	0.8%	0.0%	0.0%	1.6%	28.7%	
1983	5.5%	0.3%	0.7%	5.1%	1.2%	1.2%	0.0%	14.8%	14.5%	7.2%	18.8%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	8.1%	21.6%	
1984	2.4%	0.4%	0.0%	1.6%	6.5%	1.6%	0.0%	9.3%	37.8%	7.3%	9.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	18.7%	
1985	6.9%	1.1%	0.0%	2.1%	2.1%	1.6%	0.0%	2.3%	22.9%	4.4%	18.8%	0.0%	0.0%	0.0%	0.0%	3.3%	0.0%	0.0%	0.0%	9.0%	25.4%	
1986	3.2%	1.3%	0.0%	0.8%	2.8%	1.4%	0.0%	9.8%	29.4%	13.4%	14.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.5%	17.8%	
1987	10.5%	0.0%	1.0%	4.3%	2.9%	4.8%	0.0%	2.1%	22.4%	2.8%	7.5%	0.0%	0.9%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	6.5%	33.8%	
1988	3.0%	1.9%	0.0%	2.6%	1.3%	3.2%	1.9%	1.9%	28.7%	1.3%	14.3%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	5.0%	33.3%	
1989	4.5%	4.7%	0.8%	3.7%	1.8%	5.1%	0.0%	2.0%	20.9%	0.5%	8.1%	0.0%	0.3%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	18.3%	28.1%	
1990	5.1%	4.9%	0.0%	6.9%	2.5%	3.2%	0.0%	3.9%	15.6%	1.7%	16.8%	0.0%	0.1%	0.0%	0.0%	0.0%	2.7%	0.0%	0.0%	4.5%	31.9%	
1991	3.2%	3.6%	0.0%	2.4%	1.9%	2.1%	0.0%	6.3%	30.1%	1.3%	7.6%	0.0%	0.5%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	11.1%	29.5%	
1992	4.0%	0.0%	2.7%	6.0%	7.5%	3.5%	0.0%	10.9%	27.1%	6.2%	4.9%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	5.6%	21.1%	
1993	1.6%	2.8%	0.0%	1.6%	3.0%	1.8%	0.0%	4.5%	39.3%	4.7%	8.7%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	4.7%	26.1%	
1994	5.1%	0.0%	0.0%	1.8%	1.8%	2.9%	0.0%	5.1%	25.6%	1.8%	5.4%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%	6.5%	41.2%	
1995	7.4%	0.0%	0.0%	2.2%	3.5%	0.0%	0.0%	0.0%	12.1%	0.0%	11.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.4%	52.8%	
1996	3.3%	0.0%	0.0%	0.6%	0.9%	0.3%	0.0%	0.0%	49.4%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	2.4%	40.6%	
1997	3.9%	0.0%	0.0%	5.7%	2.6%	0.0%	4.3%	0.9%	9.6%	1.7%	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	21.3%	45.2%	
1998	7.4%	1.0%	0.0%	0.0%	7.9%	0.0%	0.0%	0.0%	12.4%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%	61.4%	
1999	6.3%	5.9%	0.0%	2.4%	4.5%	0.0%	3.8%	0.0%	10.1%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	2.4%	61.0%	
2000	16.1%	2.0%	0.0%	0.0%	4.8%	0.0%	0.0%	0.0%	8.4%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	3.6%	0.0%	0.0%	0.0%	4.0%	60.6%	
2001	4.4%	16.6%	0.0%	0.0%	12.0%	0.5%	0.0%	0.0%	8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	2.1%	54.2%	
2002	10.7%	0.0%	3.1%	3.4%	11.0%	2.0%	3.1%	0.0%	5.9%	0.0%	4.8%	0.0%	0.0%	0.0%	0.8%	2.0%	0.0%	0.0%	0.0%	3.4%	49.7%	
2003	8.6%	1.8%	2.2%	0.0%	16.5%	3.2%	0.0%	0.0%	9.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	58.1%	
2004	8.1%	0.0%	0.2%	5.6%	6.4%	1.5%	0.0%	0.0%	9.1%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.5%	66.7%	
2005	10.3%	0.5%	0.0%	2.1%	11.9%	5.7%	3.0%	0.0%	6.6%	0.0%	1.1%	0.0%	0.5%	0.0%	0.7%	3.6%	0.0%	0.0%	0.0%	1.4%	52.5%	
2006	5.2%	2.3%	2.3%	1.6%	4.1%	0.7%	0.0%	0.0%	4.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%	3.3%	75.4%	
2007	12.4%	0.3%	1.2%	6.2%	15.9%	0.6%	2.0%	0.0%	5.2%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	4.5%	49.9%	
1983-2007	6.0%	1.9%	0.6%	2.8%	4.8%	2.1%	0.6%	4.8%	18.8%	3.3%	7.5%	0.0%	0.1%	0.0%	0.1%	0.9%	0.3%	0.0%	0.0%	5.7%	39.6%	
1979-1984	3.6%	0.7%	0.6%	3.4%	1.8%	2.9%	0.1%	14.8%	21.8%	8.9%	14.5%	0.0%	0.0%	0.0%	0.0%	0.3%	0.4%	0.0%	0.0%	4.1%	22.1%	
1985-1995	4.9%	1.9%	0.4%	3.1%	2.8%	2.7%	0.2%	4.4%	24.9%	3.5%	10.8%	0.0%	0.2%	0.0%	0.0%	0.8%	0.5%	0.0%	0.0%	7.9%	31.0%	
1996-1998	4.9%	0.3%	0.0%	2.1%	3.8%	0.1%	1.4%	0.3%	23.8%	0.6%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	11.0%	49.1%	
1999-2007	9.1%	3.3%	1.0%	2.4%	9.7%	1.6%	1.3%	0.0%	7.5%	0.3%	0.8%	0.0%	0.1%	0.0%	0.2%	1.6%	0.0%	0.0%	0.0%	2.4%	58.7%	

**Appendix C.13. Percent distribution of Nanaimo River Fall reported catch among fisheries and escapement.**

Catch Year	AABM							ISSM													Esc.
	SEAK		NBC		WCVI			Geo Sit		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1984	4.1%	0.0%	0.0%	2.1%	2.7%	1.7%	0.8%	1.0%	32.0%	12.8%	20.0%	0.0%	0.0%	0.0%	0.0%	0.4%	1.0%	0.0%	0.0%	9.9%	11.6%
1991	0.3%	0.3%	0.0%	0.8%	2.1%	0.5%	0.9%	6.0%	29.5%	0.9%	11.8%	0.0%	0.8%	0.1%	0.0%	2.8%	0.7%	0.0%	0.0%	12.5%	30.0%
1992	0.1%	0.0%	0.0%	0.8%	3.2%	5.4%	0.3%	7.3%	28.7%	1.3%	7.3%	0.0%	0.4%	0.0%	0.1%	0.7%	0.6%	0.0%	0.0%	3.2%	40.5%
1993	0.1%	0.1%	0.0%	1.5%	1.9%	2.5%	0.6%	4.8%	44.5%	1.1%	5.2%	0.0%	0.6%	0.0%	0.0%	0.2%	1.0%	0.0%	0.0%	7.5%	28.2%
1994	0.5%	0.0%	0.0%	0.8%	2.3%	4.0%	1.3%	0.8%	21.6%	0.0%	8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	4.3%	55.1%
1995	0.0%	0.0%	0.0%	0.0%	1.2%	1.2%	0.9%	0.0%	14.6%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.7%	5.0%	73.5%
1996	0.0%	0.7%	0.0%	0.0%	1.4%	0.0%	0.5%	0.0%	43.6%	0.0%	2.3%	0.0%	0.3%	0.0%	0.0%	0.5%	2.5%	0.0%	8.6%	13.7%	25.9%
1997	6.3%	0.0%	0.0%	3.6%	0.0%	0.9%	0.4%	0.0%	27.7%	2.2%	1.8%	0.0%	0.0%	1.3%	0.0%	4.0%	3.1%	0.0%	0.0%	7.1%	41.5%
1998	1.0%	3.6%	0.0%	5.2%	3.6%	0.5%	0.0%	0.0%	13.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	19.3%	51.0%
1999	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	2.4%	0.0%	20.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	2.0%	0.0%	2.4%	5.9%	62.5%
2000	1.2%	0.0%	0.0%	0.0%	0.0%	3.0%	4.7%	0.0%	18.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.7%	20.7%	40.8%
2001	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	0.0%	0.0%	6.7%	1.7%	81.0%
2002	0.2%	0.1%	0.0%	0.0%	1.8%	1.0%	0.0%	0.0%	24.8%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	2.2%	2.9%	0.0%	9.1%	7.2%	50.4%
2003	0.5%	0.3%	0.0%	0.0%	7.3%	3.7%	0.6%	0.0%	13.2%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	1.5%	1.5%	0.0%	2.1%	2.7%	65.9%
2004	1.2%	0.0%	0.0%	0.6%	7.2%	4.7%	1.9%	0.0%	7.8%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	1.4%	2.0%	0.0%	11.3%	1.4%	59.8%
2005	0.5%	0.0%	0.5%	1.4%	7.0%	5.3%	1.4%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.5%	0.0%	33.7%	0.0%	42.2%
2006	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.8%	0.0%	9.1%	0.0%	86.2%
1983-2006	0.9%	0.3%	0.0%	1.0%	2.6%	2.1%	1.0%	1.2%	20.7%	1.1%	3.5%	0.0%	0.2%	0.1%	0.0%	1.4%	1.2%	0.0%	5.8%	7.2%	49.9%
1979-1984	4.1%	0.0%	0.0%	2.1%	2.7%	1.7%	0.8%	1.0%	32.0%	12.8%	20.0%	0.0%	0.0%	0.0%	0.0%	0.4%	1.0%	0.0%	0.0%	9.9%	11.6%
1985-1995	0.2%	0.1%	0.0%	0.8%	2.1%	2.7%	0.8%	3.8%	27.8%	0.7%	6.9%	0.0%	0.4%	0.0%	0.0%	0.8%	0.9%	0.0%	0.1%	6.5%	45.5%
1996-1998	2.4%	1.4%	0.0%	2.9%	1.7%	0.5%	0.3%	0.0%	28.1%	0.7%	1.9%	0.0%	0.1%	0.4%	0.0%	1.5%	1.9%	0.0%	3.2%	13.4%	39.5%
1999-2007	0.5%	0.0%	0.1%	0.2%	3.1%	2.3%	1.4%	0.0%	12.2%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	1.8%	1.2%	0.0%	10.6%	5.0%	61.4%

**Appendix C.14. Percent distribution of Nanaimo River Fall total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM														Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1984	3.9%	0.0%	0.0%	2.0%	2.8%	1.9%	0.7%	1.1%	32.7%	12.8%	19.1%	0.0%	0.0%	0.0%	0.0%	0.4%	1.1%	0.0%	0.0%	10.2%	11.2%	
1991	0.2%	0.5%	0.0%	0.9%	2.6%	2.1%	0.8%	8.4%	33.4%	1.2%	9.8%	0.0%	0.8%	0.2%	0.0%	3.2%	1.0%	0.0%	0.0%	12.0%	22.8%	
1992	0.2%	0.0%	0.0%	1.0%	3.4%	6.1%	0.3%	9.8%	31.8%	1.5%	6.6%	0.0%	0.5%	0.0%	0.1%	0.9%	0.9%	0.0%	0.0%	3.5%	33.3%	
1993	0.1%	0.4%	0.0%	1.8%	1.7%	2.8%	0.5%	6.3%	47.4%	1.4%	4.5%	0.0%	0.6%	0.0%	0.0%	0.2%	1.0%	0.0%	0.0%	7.8%	23.6%	
1994	0.7%	0.0%	0.0%	0.9%	2.7%	4.4%	1.3%	0.9%	25.1%	0.0%	8.4%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	4.7%	48.9%	
1995	0.0%	0.0%	0.0%	0.0%	1.7%	1.8%	1.0%	0.0%	17.6%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	0.7%	6.1%	65.6%	
1996	0.0%	1.3%	0.0%	0.0%	1.2%	0.3%	0.4%	0.0%	46.9%	0.0%	2.6%	0.0%	0.2%	0.0%	0.0%	0.5%	3.1%	0.0%	7.6%	14.6%	21.3%	
1997	6.8%	0.0%	0.0%	4.1%	0.0%	1.1%	0.4%	0.0%	26.9%	2.3%	3.0%	0.0%	0.0%	1.5%	0.0%	4.9%	4.5%	0.0%	0.0%	7.5%	35.0%	
1998	1.3%	9.6%	0.0%	6.3%	4.6%	0.4%	0.0%	0.0%	14.2%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	20.0%	40.8%	
1999	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	2.2%	0.0%	22.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	3.3%	0.0%	2.2%	6.9%	57.2%	
2000	1.1%	0.0%	0.0%	0.0%	0.0%	2.7%	4.9%	0.0%	20.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.3%	23.4%	37.5%	
2001	0.2%	0.0%	0.0%	0.0%	1.2%	1.2%	0.0%	0.0%	13.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.6%	10.4%	0.0%	5.6%	3.1%	58.8%	
2002	0.4%	0.2%	0.0%	0.0%	2.9%	1.2%	0.0%	0.0%	26.5%	0.0%	2.5%	0.0%	0.1%	0.2%	0.0%	2.5%	3.9%	0.0%	8.4%	7.8%	43.3%	
2003	0.6%	0.8%	0.1%	0.2%	9.3%	3.8%	0.8%	0.0%	14.4%	0.0%	0.0%	0.0%	0.1%	0.6%	0.0%	1.9%	2.9%	0.0%	2.6%	2.9%	58.9%	
2004	1.3%	0.0%	0.0%	0.6%	9.5%	4.7%	2.0%	0.0%	8.8%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	1.4%	2.6%	0.0%	11.1%	1.6%	55.4%	
2005	0.5%	0.0%	0.5%	1.3%	8.3%	5.2%	1.5%	0.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.7%	0.0%	33.7%	0.0%	40.3%	
2006	0.1%	0.0%	0.0%	0.0%	0.7%	0.4%	0.4%	0.0%	4.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.5%	1.6%	0.0%	8.8%	0.3%	82.6%	
1983-2006	1.0%	0.8%	0.0%	1.1%	3.2%	2.4%	1.0%	1.6%	23.2%	1.1%	3.7%	0.0%	0.2%	0.1%	0.0%	1.6%	2.4%	0.0%	5.4%	7.8%	43.3%	
1979-1984	3.9%	0.0%	0.0%	2.0%	2.8%	1.9%	0.7%	1.1%	32.7%	12.8%	19.1%	0.0%	0.0%	0.0%	0.0%	0.4%	1.1%	0.0%	0.0%	10.2%	11.2%	
1985-1995	0.2%	0.2%	0.0%	0.9%	2.4%	3.4%	0.8%	5.1%	31.1%	0.8%	6.6%	0.0%	0.4%	0.0%	0.0%	0.9%	1.4%	0.0%	0.1%	6.8%	38.8%	
1996-1998	2.7%	3.6%	0.0%	3.5%	1.9%	0.6%	0.3%	0.0%	30.0%	0.8%	2.6%	0.0%	0.1%	0.5%	0.0%	1.8%	2.5%	0.0%	2.8%	14.0%	32.4%	
1999-2007	0.5%	0.1%	0.1%	0.3%	4.2%	2.4%	1.5%	0.0%	14.6%	0.0%	0.3%	0.0%	0.1%	0.1%	0.0%	2.2%	3.2%	0.0%	10.3%	5.7%	54.3%	



**Appendix C.15. Percent distribution of Dome Creek Spring reported catch among fisheries and escapement.**

Catch Year	AABM							ISSM													Esc.	
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1995	0.0%	0.0%	0.0%	0.6%	0.0%	1.3%	0.0%	0.0%	5.8%	0.0%	12.3%	0.0%	0.4%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	3.2%	75.2%	
1996	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	5.5%	0.0%	33.8%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	4.6%	53.7%	
1997	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.4%	0.0%	7.2%	0.0%	30.0%	0.0%	1.4%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	58.8%	
1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.4%	0.0%	64.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	26.5%	
2000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.6%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	54.3%	0.0%	30.7%	
2001	0.0%	0.0%	0.0%	0.0%	2.8%	2.4%	0.0%	0.0%	15.7%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	49.4%	3.2%	26.1%	
2002	0.0%	0.0%	0.0%	10.9%	0.0%	12.2%	0.0%	0.0%	10.2%	0.0%	17.7%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	45.6%	
2003	0.0%	0.0%	0.0%	6.7%	0.0%	0.0%	7.6%	0.0%	15.1%	0.0%	51.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.3%	
2005	0.0%	0.0%	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	3.6%	0.0%	56.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.7%	28.9%	
2006	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	4.3%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	56.7%	0.0%	33.3%	
2007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.7%	0.0%	0.0%	0.0%	3.6%	0.0%	0.0%	0.0%	21.4%	0.0%	42.9%	0.0%	21.4%	
1983-2007	0.1%	0.0%	0.0%	1.6%	0.3%	1.7%	0.6%	0.0%	12.2%	0.0%	19.0%	0.0%	0.9%	0.0%	0.0%	0.1%	1.7%	0.0%	19.8%	3.2%	38.9%	
1996-1998	0.0%	0.0%	0.0%	0.0%	0.3%	0.4%	0.1%	0.0%	5.7%	0.0%	42.9%	0.0%	0.5%	0.0%	0.0%	0.4%	0.5%	0.0%	0.0%	2.9%	46.3%	
1999-2007	0.0%	0.0%	0.0%	2.4%	0.3%	2.2%	0.8%	0.0%	16.2%	0.0%	13.9%	0.0%	1.2%	0.0%	0.0%	0.0%	2.4%	0.0%	30.8%	3.4%	26.4%	

**Appendix C.16. Percent distribution of Dome Creek Spring total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISSM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1995	0.0%	0.0%	0.0%	0.6%	0.0%	1.9%	0.0%	0.0%	7.1%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	1.7%	0.0%	12.3%	3.3%	72.5%
1996	0.0%	0.0%	0.0%	0.6%	0.9%	0.3%	0.0%	0.0%	6.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	33.5%	4.6%	50.9%
1997	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.3%	0.0%	8.7%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	1.4%	0.0%	0.0%	29.9%	0.0%	56.6%
1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	68.0%	3.9%	23.7%
2000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.3%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	53.3%	0.0%	28.5%
2001	0.0%	0.0%	0.0%	0.0%	3.7%	2.2%	0.0%	0.0%	16.4%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	48.2%	3.3%	23.9%
2002	0.0%	0.0%	0.0%	11.1%	0.0%	11.8%	0.0%	0.0%	11.8%	0.0%	0.0%	0.0%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	18.3%	0.0%	43.8%
2003	0.0%	0.0%	0.0%	6.6%	0.0%	0.0%	9.0%	0.0%	15.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	18.9%
2005	0.0%	0.0%	0.0%	4.4%	0.0%	0.5%	0.0%	0.0%	4.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	54.9%	7.8%	27.2%
2006	0.0%	0.0%	0.0%	0.0%	0.0%	4.6%	0.0%	0.0%	4.6%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	57.5%	0.0%	32.2%
1983-2007	0.0%	0.0%	0.0%	2.4%	0.5%	2.3%	0.9%	0.0%	9.7%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.1%	0.5%	0.0%	42.6%	2.3%	37.8%
1996-1998	0.0%	0.0%	0.0%	0.2%	0.3%	0.6%	0.1%	0.0%	6.6%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.5%	0.9%	0.0%	43.8%	2.9%	43.7%
1999-2007	0.0%	0.0%	0.0%	3.7%	0.6%	3.2%	1.5%	0.0%	11.7%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.2%	0.0%	47.0%	1.9%	29.1%

**Appendix C.17. Percent distribution of Shuswap River Summer reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1995	17.0%	0.0%	5.2%	12.7%	9.5%	3.9%	0.0%	0.0%	2.0%	1.0%	8.5%	0.0%	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%	6.9%	1.0%	26.8%
1996	14.2%	0.0%	0.0%	0.0%	4.9%	0.0%	1.5%	0.0%	2.9%	0.0%	6.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.4%	1.2%	61.4%
1997	18.7%	0.9%	0.0%	12.9%	7.1%	0.6%	0.0%	0.0%	7.4%	0.9%	26.8%	0.0%	0.0%	0.0%	0.0%	4.3%	0.0%	0.0%	0.0%	0.0%	18.4%
1998	22.3%	0.2%	8.7%	9.4%	9.7%	0.0%	0.2%	0.0%	6.3%	0.0%	8.1%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.8%	33.3%
1999	28.2%	0.0%	13.0%	0.9%	14.1%	0.0%	0.0%	0.0%	5.8%	0.0%	9.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	28.0%
2000	9.5%	0.0%	6.7%	0.0%	3.7%	0.0%	0.0%	0.0%	3.4%	0.0%	6.2%	0.0%	0.0%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%	1.4%	68.5%
2001	5.5%	0.6%	0.3%	0.0%	6.8%	0.0%	0.0%	0.1%	4.0%	0.9%	0.1%	0.0%	0.1%	0.0%	0.0%	0.2%	0.0%	0.0%	4.9%	4.7%	72.0%
2002	16.3%	0.0%	3.0%	11.5%	6.7%	1.5%	0.0%	0.0%	2.6%	0.1%	9.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	48.0%
2003	10.1%	0.7%	2.0%	7.9%	7.2%	0.0%	0.3%	0.0%	5.2%	0.8%	3.8%	0.0%	0.4%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	1.8%	59.2%
2004	16.5%	0.0%	1.9%	8.6%	9.2%	0.9%	0.0%	0.0%	4.2%	0.0%	12.4%	0.0%	0.3%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	1.7%	43.1%
2005	13.6%	0.0%	0.8%	11.0%	15.6%	0.4%	3.1%	0.0%	4.1%	0.0%	5.7%	0.0%	0.3%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	3.9%	41.0%
2006	11.4%	0.0%	2.0%	12.7%	13.7%	0.3%	0.9%	0.0%	6.9%	0.0%	6.8%	0.0%	0.2%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	2.7%	41.6%
2007	5.6%	0.2%	2.9%	3.3%	9.8%	0.0%	0.7%	0.0%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.4%	5.3%	60.7%
1983-2007	14.3%	0.2%	3.4%	8.3%	8.8%	1.4%	0.5%	0.0%	4.2%	1.3%	8.6%	0.0%	0.1%	0.0%	0.0%	1.4%	0.0%	0.0%	2.0%	1.9%	43.6%
1996-1998	18.4%	0.4%	2.9%	7.4%	7.2%	0.2%	0.6%	0.0%	5.5%	0.3%	14.5%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	2.5%	0.7%	37.7%
1999-2007	13.0%	0.2%	3.6%	6.2%	9.6%	0.3%	0.5%	0.0%	4.4%	0.2%	6.0%	0.0%	0.1%	0.0%	0.1%	0.4%	0.0%	0.0%	1.5%	2.5%	51.3%



**Appendix C.18. Percent distribution of Shuswap River Summer total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1995	22.3%	0.0%	5.0%	15.1%	8.9%	4.5%	0.0%	0.0%	2.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	15.2%	0.7%	20.3%
1996	17.5%	0.0%	0.0%	0.4%	4.7%	0.3%	1.6%	0.0%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.6%	1.3%	57.4%
1997	20.9%	1.5%	0.0%	13.2%	8.0%	0.7%	0.0%	0.0%	7.5%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	0.0%	0.0%	27.9%	0.0%	15.0%
1998	23.4%	0.4%	9.5%	9.5%	11.2%	0.0%	0.1%	0.0%	6.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	8.6%	0.7%	28.9%
1999	32.0%	0.0%	13.6%	1.0%	14.6%	0.0%	0.0%	0.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.9%	0.7%	24.1%
2000	10.9%	0.0%	10.2%	0.0%	5.4%	0.0%	0.0%	0.0%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.1%	0.0%	0.0%	6.5%	1.4%	61.0%
2001	7.5%	1.4%	0.3%	0.0%	8.4%	0.0%	0.0%	0.1%	4.8%	2.2%	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%	0.0%	0.0%	5.4%	4.6%	65.1%
2002	18.0%	0.0%	3.4%	12.6%	8.0%	1.5%	0.0%	0.0%	2.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.2%	0.5%	43.8%
2003	10.9%	2.3%	2.3%	8.6%	8.4%	0.0%	0.3%	0.0%	5.6%	1.1%	0.0%	0.0%	0.4%	0.0%	0.0%	0.7%	0.0%	0.0%	3.6%	1.7%	54.2%
2004	17.8%	0.0%	2.3%	9.3%	12.3%	0.9%	0.0%	0.0%	4.5%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	1.3%	0.0%	0.0%	11.3%	1.6%	38.4%
2005	15.0%	0.0%	0.9%	12.3%	17.6%	0.4%	3.2%	0.0%	4.4%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.4%	0.0%	0.0%	5.2%	3.8%	36.7%
2006	11.9%	0.0%	2.1%	13.1%	15.5%	0.3%	1.0%	0.0%	7.3%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.9%	0.0%	0.0%	6.3%	2.7%	38.6%
2007	8.1%	0.3%	15.4%	3.6%	17.3%	0.0%	0.8%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.4%	4.2%	42.5%
1983-2007	7.6%	10.8%	0.7%	0.5%	0.0%	4.8%	0.4%	0.0%	0.0%	0.1%	0.0%	0.0%	1.1%	0.0%	0.0%	9.8%	1.8%	40.5%	7.6%	10.8%	0.7%
1996-1998	20.6%	0.6%	3.2%	7.7%	8.0%	0.3%	0.6%	0.0%	5.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	16.7%	0.7%	33.8%
1999-2007	14.5%	0.4%	5.6%	6.7%	12.0%	0.3%	0.6%	0.0%	4.8%	0.4%	0.0%	0.0%	0.1%	0.0%	0.1%	0.4%	0.0%	0.0%	6.9%	2.4%	44.9%

**Appendix C.19. Percent distribution of Nicola River Spring reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1995	0 0%	0 0%	0 0%	0 1%	0 7%	1 1%	0 3%	0 0%	2 4%	0 0%	1 7%	0 0%	0 2%	0 0%	0 0%	0 0%	0 3%	0 0%	7 8%	3 8%	81 6%
1996	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 0%	0 0%	13 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 6%	83 7%
1997	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	5 0%	0 0%	2 9%	0 0%	0 0%	0 0%	0 0%	0 0%	5 0%	0 0%	13 8%	5 4%	67 9%
1998	0 0%	0 0%	0 0%	0 0%	0 9%	0 0%	0 0%	0 0%	1 1%	0 0%	11 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	7 6%	78 6%
1999	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 6%	0 0%	2 3%	0 0%	0 5%	0 0%	0 0%	0 0%	0 0%	0 0%	24 8%	1 4%	70 3%
2000	0 0%	0 0%	0 0%	0 0%	0 9%	0 0%	0 0%	0 0%	3 1%	0 0%	0 5%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	29 1%	4 0%	62 3%
2001	0 0%	0 0%	0 0%	0 0%	0 6%	0 1%	0 0%	0 0%	3 0%	0 0%	0 0%	0 0%	0 6%	0 0%	0 0%	0 0%	0 0%	0 0%	21 8%	3 6%	70 2%
2002	0 0%	0 0%	0 0%	2 0%	0 5%	1 3%	0 0%	0 0%	1 8%	0 0%	6 6%	0 0%	1 2%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	4 3%	82 0%
2003	0 1%	0 0%	0 0%	1 8%	0 0%	0 7%	0 4%	0 0%	1 9%	0 0%	0 5%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	20 7%	5 1%	68 5%
2004	0 0%	0 0%	0 0%	1 8%	0 0%	1 8%	0 0%	0 0%	3 2%	0 0%	24 3%	0 0%	0 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	68 0%
2005	0 0%	0 0%	0 0%	0 9%	0 0%	3 3%	0 0%	0 0%	5 8%	0 0%	0 0%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	25 9%	10 0%	53 6%
2006	0 0%	0 0%	0 0%	1 3%	0 0%	1 6%	0 0%	0 0%	2 5%	0 0%	0 0%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	18 5%	8 7%	67 0%
2007	0 0%	0 0%	0 0%	0 0%	0 0%	6 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 5%	0 0%	0 0%	0 0%	0 0%	0 0%	21 8%	23 3%	46 6%
1983-2007	0 0%	0 0%	0 0%	0 6%	0 3%	1 4%	0 1%	0 0%	2 6%	0 0%	4 6%	0 0%	0 5%	0 0%	0 0%	0 0%	0 4%	0 0%	13 2%	8 3%	68 1%
1996-1998	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 0%	0 0%	2 7%	0 0%	9 5%	0 0%	0 0%	0 0%	0 0%	0 0%	1 7%	0 0%	4 6%	4 5%	76 7%
1999-2007	0 0%	0 0%	0 0%	0 9%	0 2%	1 7%	0 0%	0 0%	2 4%	0 0%	3 8%	0 0%	0 7%	0 0%	0 0%	0 0%	0 0%	0 0%	18 1%	6 7%	65 4%

**Appendix C.20. Percent distribution of Nicola River Spring total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM														Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1995	0.0%	0.0%	0.0%	0.1%	0.8%	1.3%	0.4%	0.0%	2.6%	0.0%	1.8%	0.0%	0.1%	0.0%	0.0%	0.0%	0.5%	0.0%	9.2%	4.0%	79.2%	
1996	0.0%	0.0%	0.0%	0.8%	0.3%	0.6%	0.0%	0.0%	2.3%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.5%	0.6%	81.1%	
1997	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.2%	0.0%	14.9%	0.0%	0.0%	0.0%	0.0%	0.0%	9.8%	0.0%	12.0%	4.6%	53.4%	
1998	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	1.3%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.2%	7.8%	75.4%	
1999	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	27.3%	1.5%	69.9%	
2000	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	29.7%	4.2%	61.4%	
2001	0.0%	0.0%	0.0%	0.0%	0.8%	0.1%	0.0%	0.0%	3.4%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	21.9%	3.8%	69.4%	
2002	0.0%	0.0%	0.0%	2.3%	0.5%	1.2%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	1.4%	0.0%	0.4%	0.0%	0.0%	0.0%	6.7%	4.5%	80.7%	
2003	0.1%	0.0%	0.0%	1.9%	0.0%	0.8%	0.5%	0.0%	2.1%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	21.1%	5.4%	67.7%	
2004	0.0%	0.0%	0.0%	2.2%	0.0%	2.0%	0.0%	0.0%	3.8%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	24.0%	0.0%	68.7%	
2005	0.0%	0.0%	0.0%	1.1%	0.0%	3.3%	0.0%	0.0%	6.6%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	25.8%	10.5%	52.4%	
2006	0.0%	0.0%	0.0%	1.5%	0.0%	1.8%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	18.4%	9.2%	65.8%	
2007	0.0%	0.0%	0.0%	0.0%	0.0%	6.6%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	21.9%	24.1%	45.3%	
1983-2007	0.0%	0.0%	0.0%	0.8%	0.4%	1.4%	0.1%	0.0%	2.9%	0.0%	1.4%	0.0%	0.5%	0.0%	0.0%	0.0%	0.8%	0.0%	18.8%	6.2%	66.8%	
1996-1998	0.0%	0.0%	0.0%	0.3%	0.5%	0.2%	0.0%	0.0%	2.9%	0.0%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	0.0%	12.9%	4.3%	70.0%	
1999-2007	0.0%	0.0%	0.0%	1.0%	0.3%	1.7%	0.1%	0.0%	2.9%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	21.9%	7.0%	64.4%	

Appendix C.21. Percent distribution of Cowichan River Fall reported catch among fisheries and escapement.

Catch Year	AABM							ISBM													Esc.
	BEAK		NBC		WCVI			Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1990	0.0%	0.0%	0.0%	0.0%	0.3%	1.3%	0.0%	18.7%	32.3%	1.4%	17.6%	0.0%	0.7%	0.0%	0.3%	3.2%	2.0%	0.0%	1.3%	1.6%	19.3%
1991	0.1%	0.0%	0.0%	0.2%	1.5%	3.4%	0.6%	7.3%	52.2%	0.2%	5.6%	0.0%	0.9%	0.0%	0.0%	3.7%	0.9%	0.0%	0.9%	0.6%	21.5%
1992	0.1%	0.0%	0.0%	0.4%	0.9%	9.5%	1.4%	17.1%	44.8%	1.0%	5.3%	0.0%	0.3%	0.0%	0.0%	1.4%	1.3%	0.0%	1.8%	0.9%	14.3%
1993	0.2%	0.0%	0.0%	0.1%	1.5%	7.7%	1.6%	10.0%	48.2%	0.5%	3.9%	0.0%	0.6%	0.0%	0.0%	0.9%	0.4%	0.0%	2.9%	0.7%	21.2%
1994	0.6%	0.0%	0.0%	0.4%	0.0%	3.9%	0.6%	4.5%	29.7%	0.2%	8.3%	0.0%	0.4%	0.0%	0.0%	3.6%	0.9%	0.0%	8.4%	2.2%	36.9%
1995	0.3%	0.0%	0.0%	0.0%	0.0%	4.0%	0.7%	0.0%	29.5%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	2.2%	0.7%	0.0%	3.5%	3.9%	53.4%
1996	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	37.8%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.8%	3.3%	0.0%	10.8%	2.1%	43.1%
1997	0.8%	0.0%	0.0%	0.0%	0.5%	2.3%	0.9%	0.0%	18.9%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	3.1%	2.4%	0.0%	0.8%	2.2%	67.8%
1998	3.4%	0.0%	0.0%	0.0%	0.7%	0.5%	1.4%	0.0%	17.9%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	0.0%	17.5%	6.7%	49.0%
1999	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	4.1%	0.0%	33.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.7%	6.7%	0.0%	0.0%	4.9%	9.3%	43.6%
2000	1.2%	0.1%	0.0%	0.0%	0.0%	1.3%	4.2%	0.0%	12.6%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	4.2%	1.3%	0.0%	1.2%	6.2%	67.7%
2001	0.3%	0.0%	0.0%	0.0%	0.6%	9.1%	0.0%	0.0%	22.7%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	10.9%	0.9%	0.0%	14.6%	2.1%	36.3%
2002	1.1%	0.0%	0.0%	0.0%	3.5%	3.5%	2.7%	0.0%	15.6%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	3.3%	3.5%	0.0%	24.4%	11.8%	29.9%
2003	2.1%	0.3%	0.0%	2.4%	5.4%	9.5%	2.7%	0.0%	25.3%	3.3%	0.0%	0.0%	0.6%	0.0%	0.0%	6.3%	2.4%	0.0%	10.1%	1.6%	28.0%
2004	0.0%	0.3%	0.0%	0.9%	4.0%	17.3%	11.8%	0.0%	18.6%	0.0%	0.0%	0.0%	2.5%	0.0%	0.0%	6.2%	1.9%	0.0%	6.2%	3.1%	27.2%
2005	0.0%	0.3%	0.0%	1.2%	6.8%	23.3%	1.9%	0.0%	6.8%	0.0%	0.9%	0.0%	0.3%	0.0%	0.9%	13.7%	0.6%	0.0%	15.9%	0.0%	27.6%
2006	1.1%	0.0%	0.0%	0.7%	0.0%	21.2%	10.3%	0.0%	12.8%	0.0%	0.0%	0.0%	2.2%	0.0%	0.7%	4.8%	4.0%	0.0%	13.6%	0.0%	28.6%
2007	0.0%	0.0%	0.0%	0.0%	0.0%	7.8%	1.3%	0.0%	3.9%	0.0%	0.9%	0.0%	0.0%	0.0%	0.4%	6.5%	0.0%	0.0%	11.7%	0.0%	67.5%
1983-2007	0.6%	0.1%	0.0%	0.3%	1.5%	7.0%	2.6%	3.2%	25.7%	0.4%	2.5%	0.0%	0.6%	0.0%	0.2%	4.7%	1.5%	0.0%	8.3%	2.8%	38.0%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0.2%	0.0%	0.0%	0.2%	0.7%	5.0%	0.9%	9.6%	39.5%	0.6%	7.1%	0.0%	0.5%	0.0%	0.0%	2.5%	1.0%	0.0%	3.1%	1.6%	27.7%
1996-1998	1.5%	0.0%	0.0%	0.0%	0.4%	0.9%	1.1%	0.0%	24.9%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	2.2%	1.9%	0.0%	9.7%	3.7%	53.3%
1999-2007	0.6%	0.1%	0.0%	0.6%	2.4%	10.3%	4.3%	0.0%	16.8%	0.4%	0.2%	0.0%	0.8%	0.0%	0.3%	6.9%	1.6%	0.0%	11.3%	3.4%	36.9%

**Appendix C.22. Percent distribution of Cowichan River Fall total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1990	0 0%	0 0%	0 0%	0 1%	0 6%	2 8%	0 1%	17 3%	40 2%	1 4%	13 5%	0 0%	0 8%	0 0%	0 2%	4 5%	2 5%	0 0%	1 0%	1 5%	13 4%
1991	0 1%	0 0%	0 0%	0 2%	1 5%	4 5%	0 7%	10 3%	53 3%	0 4%	4 8%	0 0%	0 9%	0 0%	0 0%	3 8%	1 0%	0 0%	0 8%	0 8%	16 9%
1992	0 1%	0 1%	0 0%	0 4%	0 9%	9 6%	1 2%	20 1%	45 4%	1 1%	4 6%	0 0%	0 3%	0 0%	0 0%	1 4%	1 4%	0 0%	1 5%	0 5%	11 4%
1993	0 3%	0 0%	0 0%	0 1%	1 3%	8 1%	1 4%	12 4%	49 9%	0 5%	3 4%	0 0%	0 6%	0 0%	0 0%	0 9%	0 5%	0 0%	2 2%	0 7%	17 6%
1994	0 6%	0 0%	0 0%	0 4%	0 0%	4 2%	0 8%	5 2%	33 5%	0 2%	8 3%	0 0%	0 4%	0 0%	0 0%	4 4%	0 6%	0 0%	7 7%	2 5%	31 2%
1995	0 4%	0 0%	0 0%	0 0%	0 0%	5 7%	0 6%	0 0%	33 0%	0 0%	3 1%	0 0%	0 0%	0 0%	0 0%	2 5%	1 1%	0 0%	3 3%	4 2%	46 1%
1996	0 3%	0 0%	0 0%	0 0%	0 0%	0 3%	1 0%	0 0%	42 0%	0 0%	1 0%	0 0%	0 0%	0 0%	0 0%	1 0%	4 9%	0 0%	10 0%	2 4%	37 0%
1997	1 0%	0 0%	0 0%	0 0%	0 6%	2 9%	0 9%	0 0%	22 2%	0 0%	1 6%	0 0%	0 0%	0 0%	0 0%	3 6%	3 5%	0 0%	0 8%	2 6%	60 2%
1998	4 0%	0 0%	0 0%	0 0%	0 8%	0 4%	1 5%	0 0%	20 4%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	3 5%	0 0%	0 0%	17 1%	7 5%	44 4%
1999	0 0%	0 0%	0 0%	0 0%	1 0%	0 0%	4 1%	0 0%	37 6%	0 0%	0 0%	0 0%	1 0%	0 0%	0 6%	8 9%	0 0%	0 0%	4 1%	5 5%	37 2%
2000	1 6%	0 4%	0 0%	0 0%	0 0%	1 3%	4 5%	0 0%	14 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	5 2%	2 4%	0 0%	1 2%	7 3%	61 3%
2001	0 4%	0 0%	0 0%	0 0%	0 9%	8 5%	0 0%	0 0%	25 7%	0 0%	0 0%	0 0%	0 1%	0 0%	0 0%	12 9%	2 8%	0 0%	13 6%	2 3%	32 7%
2002	1 3%	0 0%	0 0%	0 0%	4 1%	3 3%	2 7%	0 0%	17 4%	0 0%	0 0%	0 0%	0 6%	0 0%	0 0%	3 6%	5 0%	0 0%	22 8%	12 9%	26 3%
2003	2 2%	0 7%	0 0%	2 5%	6 4%	8 6%	3 0%	0 0%	26 7%	4 4%	0 0%	0 0%	0 5%	0 0%	0 0%	7 7%	3 5%	0 0%	8 9%	1 7%	23 2%
2004	0 0%	0 8%	0 0%	0 8%	5 3%	16 0%	12 0%	0 0%	20 7%	0 0%	0 0%	0 0%	2 7%	0 0%	0 0%	6 9%	2 1%	0 0%	5 9%	3 5%	23 4%
2005	0 0%	0 3%	0 0%	1 3%	8 5%	22 2%	2 1%	0 0%	7 4%	0 0%	1 1%	0 0%	0 3%	0 0%	0 8%	17 2%	1 1%	0 0%	14 3%	0 0%	23 5%
2006	1 0%	0 0%	0 0%	0 7%	0 0%	20 5%	11 0%	0 0%	13 7%	0 0%	0 0%	0 0%	2 4%	0 0%	0 7%	4 8%	5 1%	0 0%	13 4%	0 0%	26 7%
2007	0 0%	0 0%	0 0%	0 0%	0 0%	7 5%	1 3%	0 0%	5 0%	0 0%	0 8%	0 0%	0 0%	0 0%	0 8%	7 9%	0 0%	0 0%	11 7%	0 0%	65 0%
1983-2007	0 7%	0 1%	0 0%	0 4%	1 8%	7 0%	2 7%	3 6%	28 3%	0 5%	2 4%	0 0%	0 6%	0 0%	0 2%	5 6%	2 1%	0 0%	7 8%	3 1%	33 2%
1979-1984	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
1985-1995	0 2%	0 0%	0 0%	0 2%	0 7%	5 8%	0 8%	10 9%	42 6%	0 6%	6 3%	0 0%	0 5%	0 0%	0 0%	2 9%	1 2%	0 0%	2 8%	1 7%	22 8%
1996-1998	1 8%	0 0%	0 0%	0 0%	0 5%	1 2%	1 1%	0 0%	28 2%	0 0%	1 0%	0 0%	0 0%	0 0%	0 0%	2 7%	2 8%	0 0%	9 3%	4 2%	47 2%
1999-2007	0 7%	0 2%	0 0%	0 6%	2 9%	9 8%	4 5%	0 0%	18 8%	0 5%	0 2%	0 0%	0 8%	0 0%	0 3%	8 4%	2 4%	0 0%	10 6%	3 7%	35 5%

**Appendix C.23. Percent distribution of Chilliwack River Fall reported catch among fisheries and escapement.**

Catch Year	AASM							ISSM													Esc.
	SEAK		NBC		WCVI			Geo St		Canada		WA/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1985	0.5%	0.0%	0.0%	0.3%	0.2%	34.5%	0.0%	5.4%	22.5%	2.3%	6.7%	0.0%	4.0%	0.0%	0.4%	4.2%	3.3%	0.0%	0.0%	0.9%	14.6%
1986	0.0%	0.0%	0.0%	0.8%	0.2%	19.5%	0.0%	7.8%	19.3%	2.5%	14.1%	0.0%	2.8%	0.0%	0.2%	4.0%	5.6%	0.0%	0.0%	1.1%	22.2%
1987	0.0%	0.0%	0.0%	0.7%	0.3%	16.2%	0.5%	14.6%	19.5%	0.4%	2.8%	0.0%	3.8%	0.0%	0.2%	3.8%	2.5%	0.0%	0.0%	1.3%	33.5%
1988	0.4%	0.1%	0.0%	0.2%	0.0%	17.9%	0.0%	6.6%	10.6%	0.0%	2.4%	0.0%	4.2%	0.0%	0.1%	3.0%	1.7%	0.0%	0.0%	2.6%	50.3%
1989	0.3%	0.0%	0.0%	0.0%	0.0%	19.5%	0.0%	1.4%	15.3%	0.0%	4.2%	0.0%	5.3%	0.0%	0.2%	3.8%	1.2%	0.0%	0.0%	0.7%	48.3%
1990	0.9%	0.0%	0.0%	0.0%	0.3%	9.5%	2.4%	3.6%	10.5%	0.2%	5.7%	0.0%	6.2%	0.0%	0.5%	12.1%	5.0%	0.0%	0.0%	1.2%	42.0%
1991	0.2%	0.1%	0.0%	0.4%	0.2%	18.3%	0.7%	7.8%	12.4%	0.2%	5.1%	0.0%	13.4%	0.0%	0.1%	5.3%	4.5%	0.0%	0.0%	1.7%	29.5%
1992	0.3%	0.0%	0.0%	0.1%	0.2%	18.0%	0.1%	5.3%	9.8%	0.8%	1.3%	0.0%	8.3%	0.0%	0.1%	0.9%	3.2%	0.0%	0.0%	1.2%	50.7%
1993	0.2%	0.0%	0.0%	0.0%	0.4%	11.8%	0.4%	6.6%	6.6%	0.0%	1.5%	0.0%	7.1%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	1.6%	63.0%
1994	0.3%	0.2%	0.0%	0.7%	0.0%	6.8%	2.4%	2.8%	5.2%	0.3%	8.0%	0.0%	1.8%	0.0%	0.0%	3.7%	3.6%	0.0%	0.0%	5.5%	60.8%
1995	0.0%	0.0%	0.0%	0.0%	0.2%	8.7%	0.5%	0.0%	5.4%	0.0%	2.0%	0.0%	1.2%	0.0%	0.0%	1.1%	1.7%	0.0%	0.0%	1.1%	78.3%
1996	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	13.2%	0.0%	2.4%	0.0%	4.4%	0.0%	0.0%	0.9%	2.8%	0.0%	0.0%	2.4%	73.0%
1997	0.7%	0.0%	0.0%	0.1%	0.6%	9.9%	2.0%	0.0%	12.0%	0.4%	2.9%	0.0%	4.9%	0.0%	0.1%	2.3%	3.2%	0.0%	0.0%	3.0%	58.3%
1998	0.4%	0.0%	0.0%	0.0%	0.1%	0.2%	0.3%	0.0%	2.7%	0.0%	0.5%	0.0%	3.0%	0.0%	0.0%	0.3%	0.4%	0.0%	0.0%	1.2%	91.0%
1999	0.1%	0.0%	0.0%	0.1%	0.2%	0.3%	1.9%	0.0%	8.7%	0.0%	0.4%	0.0%	11.6%	0.0%	0.5%	0.7%	0.4%	0.0%	0.0%	1.6%	73.5%
2000	0.1%	0.0%	0.0%	0.0%	0.4%	5.1%	2.0%	0.0%	3.3%	0.0%	0.0%	0.0%	3.8%	0.0%	0.0%	0.5%	0.4%	0.0%	0.0%	2.2%	82.1%
2001	0.1%	0.1%	0.0%	0.0%	0.3%	3.3%	1.5%	0.0%	5.7%	0.0%	0.0%	0.0%	5.7%	0.0%	0.4%	0.9%	2.2%	0.0%	0.0%	11.2%	68.8%
2002	0.2%	0.0%	0.0%	0.1%	0.2%	8.4%	4.5%	0.0%	3.0%	0.0%	0.6%	0.0%	7.0%	0.0%	1.1%	0.3%	1.3%	0.0%	0.0%	4.7%	68.8%
2003	0.2%	0.0%	0.0%	0.0%	0.2%	5.7%	2.3%	0.0%	2.9%	0.0%	0.3%	0.0%	7.5%	0.0%	0.4%	0.3%	0.8%	0.0%	0.0%	6.2%	73.6%
2004	0.1%	0.0%	0.0%	0.1%	0.0%	5.0%	2.0%	0.0%	1.8%	0.0%	0.7%	0.0%	5.9%	0.0%	0.2%	0.1%	0.8%	0.0%	0.0%	4.4%	78.9%
2005	0.0%	0.0%	0.0%	0.1%	0.2%	7.4%	3.8%	0.0%	3.0%	0.0%	3.1%	0.0%	3.4%	0.0%	0.8%	0.8%	0.5%	0.0%	0.0%	5.8%	71.1%
2006	0.0%	0.0%	0.0%	0.4%	0.0%	6.9%	1.8%	0.0%	1.9%	0.0%	0.4%	0.0%	2.1%	0.0%	0.2%	0.2%	1.0%	0.0%	0.0%	4.3%	80.5%
2007	0.0%	0.0%	0.0%	0.4%	0.0%	7.1%	2.6%	0.0%	0.8%	0.0%	2.8%	0.0%	2.0%	0.0%	0.1%	0.4%	0.4%	0.0%	0.2%	5.8%	77.3%
1983-2007	0.2%	0.0%	0.0%	0.2%	0.2%	10.4%	1.4%	2.7%	8.5%	0.3%	2.8%	0.0%	5.2%	0.0%	0.2%	2.2%	2.1%	0.0%	0.0%	3.1%	60.4%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0.3%	0.0%	0.0%	0.3%	0.2%	16.4%	0.6%	5.6%	12.4%	0.8%	4.7%	0.0%	5.2%	0.0%	0.2%	3.8%	3.0%	0.0%	0.0%	1.7%	44.8%
1996-1998	0.4%	0.0%	0.0%	0.0%	0.2%	3.4%	0.5%	0.0%	9.3%	0.1%	1.8%	0.0%	4.1%	0.0%	0.0%	1.2%	2.1%	0.0%	0.0%	2.2%	74.1%
1999-2007	0.1%	0.0%	0.0%	0.1%	0.2%	5.5%	2.5%	0.0%	3.4%	0.0%	0.9%	0.0%	5.4%	0.0%	0.4%	0.5%	0.9%	0.0%	0.0%	5.1%	74.9%



**Appendix C.24. Percent distribution of Chilliwack River Fall total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1985	11%	01%	00%	04%	02%	342%	00%	62%	217%	23%	64%	00%	39%	00%	04%	49%	43%	00%	00%	09%	131%
1986	00%	00%	00%	08%	02%	205%	00%	95%	178%	26%	131%	00%	28%	00%	02%	50%	78%	00%	00%	10%	189%
1987	00%	00%	00%	08%	03%	190%	05%	160%	186%	05%	23%	00%	40%	00%	02%	39%	27%	00%	00%	12%	299%
1988	04%	02%	00%	02%	00%	186%	00%	66%	111%	00%	23%	00%	43%	00%	01%	41%	28%	00%	00%	26%	467%
1989	03%	00%	00%	00%	00%	240%	00%	18%	184%	00%	37%	00%	60%	00%	02%	38%	13%	00%	00%	06%	397%
1990	10%	00%	00%	00%	04%	113%	22%	37%	112%	01%	50%	00%	65%	00%	05%	167%	79%	00%	00%	10%	325%
1991	03%	02%	00%	04%	02%	200%	07%	93%	133%	02%	45%	00%	138%	00%	01%	60%	52%	00%	00%	16%	243%
1992	03%	00%	00%	01%	02%	202%	01%	67%	104%	07%	12%	00%	87%	00%	01%	09%	35%	00%	00%	12%	456%
1993	03%	00%	00%	00%	04%	133%	04%	82%	73%	00%	14%	00%	76%	00%	00%	00%	11%	00%	00%	16%	586%
1994	04%	03%	00%	08%	00%	84%	27%	34%	62%	04%	66%	00%	15%	00%	00%	55%	60%	00%	00%	52%	525%
1995	00%	00%	00%	00%	02%	130%	05%	00%	64%	00%	24%	00%	11%	00%	00%	14%	24%	00%	00%	11%	715%
1996	02%	00%	00%	01%	00%	21%	06%	00%	157%	00%	28%	00%	43%	00%	00%	12%	46%	00%	00%	24%	660%
1997	08%	00%	00%	02%	08%	124%	19%	00%	137%	04%	28%	00%	54%	00%	01%	25%	40%	00%	00%	29%	520%
1998	05%	00%	00%	00%	02%	02%	03%	00%	32%	00%	06%	00%	34%	00%	00%	03%	09%	00%	00%	13%	891%
1999	01%	00%	00%	01%	03%	03%	19%	00%	105%	00%	04%	00%	136%	00%	05%	07%	05%	00%	00%	17%	693%
2000	02%	00%	00%	00%	05%	55%	24%	00%	40%	00%	00%	00%	45%	00%	01%	08%	11%	00%	00%	23%	787%
2001	01%	02%	00%	00%	03%	35%	16%	00%	68%	00%	00%	00%	65%	00%	04%	11%	50%	00%	00%	112%	632%
2002	03%	00%	00%	01%	03%	86%	51%	00%	36%	00%	06%	00%	81%	00%	12%	04%	21%	00%	00%	48%	649%
2003	02%	00%	00%	00%	02%	59%	28%	00%	29%	00%	03%	00%	85%	00%	05%	03%	13%	00%	00%	64%	707%
2004	02%	00%	00%	02%	00%	52%	23%	00%	21%	00%	07%	00%	68%	00%	02%	01%	11%	00%	00%	47%	785%
2005	00%	00%	00%	01%	02%	75%	43%	00%	35%	00%	31%	00%	38%	00%	09%	09%	09%	00%	00%	60%	689%
2006	00%	00%	00%	05%	00%	73%	21%	00%	23%	00%	04%	00%	27%	00%	03%	03%	16%	00%	00%	45%	779%
2007	00%	00%	00%	05%	00%	83%	30%	00%	11%	00%	31%	00%	25%	00%	01%	07%	20%	00%	02%	60%	725%
1983-2007	03%	00%	00%	02%	02%	117%	15%	31%	92%	03%	28%	00%	57%	00%	03%	27%	30%	00%	00%	31%	558%
1979-1984	00%	00%	00%	00%	00%	00%	00%	00%	00%	00%	00%	00%	00%	00%	00%	00%	00%	00%	00%	00%	00%
1985-1995	04%	01%	00%	03%	02%	184%	06%	65%	130%	06%	44%	00%	55%	00%	02%	47%	41%	00%	00%	16%	394%
1996-1998	05%	00%	00%	01%	03%	49%	09%	00%	109%	01%	21%	00%	44%	00%	00%	14%	31%	00%	00%	22%	690%
1999-2007	01%	00%	00%	02%	02%	58%	28%	00%	41%	00%	10%	00%	63%	00%	05%	06%	17%	00%	00%	53%	714%

**Appendix C.25. Percent distribution of Nooksack Spring Yearling reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1996	1.4%	0.0%	0.0%	0.0%	1.3%	0.0%	4.2%	0.0%	16.8%	0.0%	5.3%	0.0%	0.7%	0.0%	0.0%	0.2%	6.4%	0.0%	0.1%	0.0%	63.6%
1997	3.5%	0.2%	0.7%	0.2%	0.2%	1.6%	2.9%	0.0%	10.3%	0.1%	0.4%	0.0%	0.5%	0.0%	0.0%	0.5%	5.3%	0.0%	0.8%	0.0%	72.9%
1998	6.1%	0.2%	0.0%	0.0%	0.0%	1.7%	2.4%	0.0%	2.9%	0.0%	0.1%	0.0%	0.2%	0.0%	0.0%	0.1%	0.6%	0.0%	0.0%	0.0%	83.6%
1999	1.6%	0.9%	0.0%	0.0%	1.1%	1.1%	5.4%	0.0%	3.6%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	84.4%
2000	4.6%	0.2%	0.0%	0.0%	0.0%	19.5%	4.5%	0.0%	11.8%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	0.4%	0.0%	0.0%	0.0%	58.6%
2001	1.4%	0.0%	0.0%	0.0%	0.0%	9.9%	4.4%	0.0%	4.2%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.5%	0.7%	0.0%	0.3%	0.0%	77.5%
2002	5.5%	0.0%	0.5%	0.8%	1.4%	17.4%	2.1%	0.0%	1.3%	0.0%	0.0%	0.0%	0.2%	0.0%	0.4%	0.2%	0.5%	0.0%	0.0%	0.0%	69.8%
2003	3.4%	0.0%	0.0%	0.0%	0.5%	13.6%	2.3%	0.0%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	1.8%	0.0%	1.0%	0.0%	71.1%
2004	1.3%	0.0%	0.0%	0.3%	0.0%	32.2%	4.8%	0.0%	8.9%	0.0%	0.0%	0.0%	2.7%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	48.9%
2005	3.4%	0.1%	0.0%	0.2%	0.0%	32.0%	3.9%	0.0%	7.5%	0.0%	0.4%	0.0%	0.5%	0.0%	0.2%	0.0%	0.5%	0.0%	0.9%	0.0%	50.4%
2006	1.9%	0.0%	0.6%	1.2%	0.0%	32.2%	6.2%	0.0%	7.3%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.2%	2.9%	0.0%	2.3%	0.4%	43.6%
2007	5.4%	0.0%	1.0%	0.0%	0.0%	24.9%	9.0%	0.0%	6.9%	0.0%	0.2%	0.0%	0.4%	0.0%	0.0%	0.0%	3.3%	0.0%	0.6%	0.4%	48.1%
1983-2007	3.4%	0.1%	0.2%	0.2%	0.4%	15.5%	4.3%	0.0%	7.3%	0.0%	0.5%	0.0%	0.7%	0.0%	0.1%	0.2%	2.0%	0.0%	0.5%	0.1%	64.4%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1996-1998	4.3%	0.1%	0.2%	0.1%	0.5%	1.1%	3.2%	0.0%	10.0%	0.0%	2.0%	0.0%	0.5%	0.0%	0.0%	0.3%	4.1%	0.0%	0.3%	0.0%	73.4%
1999-2007	3.2%	0.1%	0.2%	0.3%	0.3%	20.3%	4.7%	0.0%	6.4%	0.0%	0.1%	0.0%	0.8%	0.0%	0.1%	0.2%	1.3%	0.0%	0.6%	0.1%	61.4%

**Appendix C.26. Percent distribution of Nooksack Spring Yearling total fishing mortalities among fisheries and escapement.**

Catch Year	SEAK			AABM		NBC		WCVI		Geo St		Canada			ISBM			Puget Sound		Terminal			Esc.
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1996	3.4%	0.0%	0.2%	0.0%	1.1%	0.7%	4.2%	0.0%	18.6%	0.0%	6.3%	0.0%	0.7%	0.0%	0.0%	0.2%	9.4%	0.0%	0.1%	0.0%			55.2%
1997	4.0%	0.4%	0.8%	0.3%	0.2%	2.0%	2.9%	0.0%	11.4%	0.0%	1.3%	0.0%	0.6%	0.0%	0.0%	0.4%	6.4%	0.0%	0.8%	0.0%			68.3%
1998	8.8%	0.5%	0.0%	0.0%	0.0%	1.8%	2.7%	0.0%	3.3%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.1%	1.1%	0.0%	0.0%	0.0%			81.3%
1999	2.0%	2.3%	0.0%	0.0%	1.3%	1.1%	5.7%	0.0%	4.3%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%			80.7%
2000	5.3%	0.3%	0.0%	0.0%	0.0%	19.9%	4.8%	0.0%	13.5%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	0.7%	0.0%	0.0%	0.0%			55.0%
2001	2.0%	0.0%	0.0%	0.0%	0.0%	10.1%	5.0%	0.0%	5.1%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.5%	1.6%	0.0%	0.3%	0.0%			74.4%
2002	6.2%	0.0%	0.5%	0.9%	1.7%	17.7%	2.3%	0.0%	1.4%	0.0%	0.0%	0.0%	0.2%	0.0%	0.5%	0.2%	0.7%	0.0%	0.0%	0.0%			67.6%
2003	3.7%	0.0%	0.0%	0.0%	0.8%	14.2%	3.0%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	3.3%	0.0%	0.9%	0.0%			67.1%
2004	1.6%	0.0%	0.0%	0.3%	0.0%	31.7%	5.4%	0.0%	10.6%	0.0%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%			46.0%
2005	3.9%	0.1%	0.0%	0.2%	0.0%	32.4%	4.4%	0.0%	8.3%	0.0%	0.5%	0.0%	0.5%	0.0%	0.2%	0.0%	0.8%	0.0%	0.8%	0.0%			47.9%
2006	2.3%	0.0%	0.5%	1.2%	0.0%	32.3%	6.8%	0.0%	8.6%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.2%	3.9%	0.0%	2.3%	0.4%			40.3%
2007	5.8%	0.0%	1.4%	0.0%	0.0%	24.8%	9.6%	0.0%	8.0%	0.0%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	5.2%	0.0%	0.5%	0.3%			43.8%
1983-2007	4.1%	0.3%	0.3%	0.3%	0.4%	15.7%	4.7%	0.0%	8.3%	0.0%	0.7%	0.0%	0.8%	0.0%	0.1%	0.2%	3.0%	0.0%	0.5%	0.1%			60.6%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0%
1985-1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0%
1996-1998	5.4%	0.3%	0.3%	0.1%	0.4%	1.5%	3.3%	0.0%	11.1%	0.0%	2.6%	0.0%	0.5%	0.0%	0.0%	0.3%	5.6%	0.0%	0.3%	0.0%			68.2%
1999-2007	3.6%	0.3%	0.3%	0.3%	0.4%	20.4%	5.2%	0.0%	7.4%	0.0%	0.1%	0.0%	0.9%	0.0%	0.1%	0.2%	2.1%	0.0%	0.5%	0.1%			58.1%

**Appendix C.27. Percent distribution of Skagit Spring Fingerling reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM														Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1997	1.0%	0.0%	0.0%	0.4%	0.9%	1.4%	4.0%	0.0%	8.7%	0.6%	1.8%	0.0%	0.0%	0.0%	0.0%	0.9%	7.3%	0.0%	0.6%	0.0%	72.5%	
1998	2.0%	0.0%	0.0%	0.0%	1.1%	0.0%	3.0%	0.0%	9.3%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.5%	2.6%	0.0%	1.2%	0.0%	79.5%	
1999	0.5%	0.6%	0.0%	0.2%	0.7%	0.5%	6.1%	0.0%	4.7%	0.0%	0.1%	0.0%	0.3%	0.0%	0.0%	0.5%	1.7%	0.0%	1.0%	0.0%	83.2%	
2000	1.6%	0.0%	0.4%	0.0%	0.4%	5.6%	6.2%	0.0%	9.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	2.5%	0.0%	0.1%	0.0%	73.9%	
2001	1.3%	0.2%	0.3%	0.2%	1.3%	5.2%	3.8%	0.0%	5.4%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	4.3%	0.0%	0.5%	0.0%	77.2%	
2002	2.5%	0.0%	0.5%	0.5%	0.9%	6.7%	4.6%	0.0%	6.8%	0.0%	0.1%	0.0%	0.3%	0.0%	0.1%	0.0%	2.5%	0.0%	0.6%	0.0%	74.0%	
2003	2.2%	0.0%	0.9%	1.2%	1.3%	16.2%	0.7%	0.0%	5.3%	0.0%	0.1%	0.0%	1.3%	0.0%	0.0%	0.1%	1.2%	0.0%	0.7%	0.0%	66.6%	
2004	0.0%	0.0%	0.0%	0.4%	0.0%	11.4%	2.6%	0.0%	9.1%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	1.5%	0.0%	1.3%	0.0%	71.3%	
2005	1.3%	0.1%	0.0%	0.0%	2.3%	10.9%	5.3%	0.0%	5.4%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.3%	3.7%	70.2%	
2006	0.4%	0.1%	0.2%	0.2%	0.5%	6.6%	2.6%	0.0%	6.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.5%	2.6%	0.0%	1.0%	15.3%	63.7%	
2007	0.3%	0.0%	0.0%	0.0%	0.0%	9.2%	6.5%	0.0%	5.5%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.3%	2.9%	0.0%	1.4%	19.5%	53.6%	
1983-2007	1.2%	0.1%	0.2%	0.3%	0.8%	6.9%	4.1%	0.0%	6.9%	0.1%	0.3%	0.0%	0.5%	0.0%	0.0%	0.3%	2.7%	0.0%	0.8%	3.5%	71.4%	
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
1985-1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
1996-1998	1.5%	0.0%	0.0%	0.2%	1.0%	0.7%	3.5%	0.0%	9.0%	0.3%	1.3%	0.0%	0.0%	0.0%	0.0%	0.7%	4.9%	0.0%	0.9%	0.0%	76.0%	
1999-2007	1.1%	0.1%	0.2%	0.3%	0.8%	8.3%	4.3%	0.0%	6.4%	0.0%	0.1%	0.0%	0.6%	0.0%	0.0%	0.2%	2.2%	0.0%	0.8%	4.3%	70.4%	

**Appendix C.28. Percent distribution of Skagit Spring Fingerling total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			W/VOR coast			Puget Sound		Terminal			
	Trawl	Net	Sport	Trawl	Sport	Trawl	Sport	Trawl	Sport	Trawl	Net	Sport	Trawl	Net	Sport	Net	Sport	Trawl	Net	Sport	
1997	1.2%	0.0%	0.0%	0.4%	1.2%	1.6%	4.3%	0.0%	9.9%	0.5%	3.0%	0.0%	0.0%	0.0%	0.0%	0.8%	8.9%	0.0%	0.5%	0.0%	67.5%
1998	2.2%	0.0%	0.0%	0.0%	1.5%	0.0%	3.3%	0.0%	10.7%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.4%	6.3%	0.0%	1.1%	0.0%	73.4%
1999	0.9%	1.3%	0.0%	0.2%	0.8%	0.6%	6.5%	0.0%	5.8%	0.0%	0.1%	0.0%	0.4%	0.0%	0.0%	0.5%	2.8%	0.0%	1.0%	0.0%	79.1%
2000	2.0%	0.0%	0.6%	0.0%	0.5%	6.0%	6.7%	0.0%	10.9%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%	5.0%	0.0%	0.1%	0.0%	67.8%
2001	1.8%	0.4%	0.4%	0.3%	1.6%	5.0%	4.1%	0.0%	6.2%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	9.4%	0.0%	0.5%	0.0%	70.2%
2002	2.8%	0.0%	0.5%	0.5%	1.1%	6.7%	5.1%	0.0%	7.7%	0.0%	0.1%	0.0%	0.3%	0.0%	0.1%	0.0%	3.7%	0.0%	0.5%	0.0%	70.8%
2003	2.4%	0.0%	1.0%	1.3%	1.6%	18.7%	0.8%	0.0%	6.1%	0.0%	0.1%	0.0%	1.4%	0.0%	0.0%	0.1%	1.8%	0.0%	0.7%	0.0%	63.9%
2004	0.0%	0.0%	0.0%	0.5%	0.0%	11.8%	2.9%	0.0%	10.8%	0.0%	0.0%	0.0%	2.7%	0.0%	0.0%	0.0%	2.4%	0.0%	1.3%	0.0%	67.6%
2005	1.6%	0.2%	0.0%	0.0%	3.0%	11.2%	6.0%	0.0%	6.5%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.3%	4.0%	66.3%
2006	0.5%	0.1%	0.3%	0.3%	0.6%	6.9%	2.9%	0.0%	7.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.5%	4.2%	0.0%	1.0%	16.4%	59.2%
2007	0.4%	0.2%	0.0%	0.0%	0.0%	8.9%	6.7%	0.0%	6.3%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.3%	3.6%	0.0%	1.3%	21.2%	50.3%
1983-2007	1.4%	0.2%	0.3%	0.3%	1.1%	7.0%	4.5%	0.0%	8.0%	0.0%	0.4%	0.0%	0.5%	0.0%	0.0%	0.3%	4.4%	0.0%	0.8%	3.8%	66.9%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1996-1998	1.7%	0.0%	0.0%	0.2%	1.4%	0.8%	3.6%	0.0%	10.3%	0.3%	2.0%	0.0%	0.0%	0.0%	0.0%	0.6%	7.6%	0.0%	0.8%	0.0%	70.5%
1999-2007	1.4%	0.2%	0.3%	0.3%	1.0%	8.4%	4.6%	0.0%	7.5%	0.0%	0.1%	0.0%	0.7%	0.0%	0.0%	0.2%	3.7%	0.0%	0.7%	4.8%	66.1%

**Appendix C.29. Percent distribution of Skagit Spring Yearling reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo St		Canada		WA/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1985	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%	0.0%	29.2%	0.0%	26.7%	0.0%	0.0%	0.0%	0.0%	10.0%	15.8%	0.0%	0.0%	0.0%	11.7%
1986	1.4%	0.0%	0.0%	0.0%	0.0%	6.2%	5.7%	6.2%	35.5%	4.3%	9.5%	0.0%	0.0%	0.0%	0.0%	3.3%	7.6%	0.0%	0.0%	0.0%	20.4%
1987	0.0%	0.0%	0.0%	4.6%	0.0%	3.7%	0.0%	0.0%	10.2%	0.0%	12.0%	0.0%	1.9%	0.0%	0.0%	24.1%	20.4%	0.0%	0.0%	0.0%	23.1%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	9.6%	0.4%	14.5%	0.0%	13.6%	0.0%	1.8%	0.0%	0.0%	20.6%	14.5%	0.0%	0.0%	0.0%	23.2%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	1.8%	0.0%	17.5%	0.8%	3.4%	0.0%	4.3%	0.0%	0.0%	12.4%	8.4%	0.0%	18.0%	0.0%	29.9%
1990	0.0%	0.0%	0.0%	0.0%	1.0%	4.9%	8.7%	3.1%	11.0%	0.4%	5.9%	0.0%	3.4%	0.0%	0.0%	13.5%	22.7%	0.0%	1.9%	0.0%	23.4%
1997	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	10.2%	0.0%	19.6%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	1.3%	20.9%	0.0%	1.1%	0.0%	42.2%
1998	0.5%	0.0%	0.0%	0.0%	3.5%	1.3%	7.3%	0.0%	9.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	2.5%	17.1%	0.0%	0.7%	0.0%	57.7%
1999	0.6%	0.0%	0.0%	0.0%	0.3%	1.2%	4.5%	0.0%	7.7%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.1%	9.0%	0.0%	1.3%	0.0%	75.2%
2000	0.8%	0.0%	0.0%	0.0%	0.8%	6.4%	2.7%	0.0%	15.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	15.6%	0.0%	0.6%	0.0%	56.9%
2001	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	2.4%	0.0%	12.0%	0.0%	0.0%	0.0%	3.2%	0.0%	0.0%	0.0%	10.8%	0.0%	2.0%	0.0%	66.4%
2002	1.1%	0.0%	0.0%	0.0%	0.0%	1.1%	14.8%	0.0%	14.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	8.5%	0.0%	0.7%	0.0%	59.0%
2003	0.0%	0.0%	0.0%	0.9%	0.3%	20.3%	3.9%	0.0%	9.3%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.6%	7.5%	0.0%	0.2%	0.0%	56.7%
2004	0.2%	0.0%	0.0%	0.0%	0.8%	13.0%	3.7%	0.0%	5.4%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.2%	3.9%	0.0%	0.8%	0.1%	71.2%
2005	1.0%	0.0%	0.0%	0.2%	0.0%	7.7%	5.3%	0.0%	10.4%	0.0%	0.3%	0.0%	0.3%	0.0%	0.3%	0.1%	6.1%	0.0%	1.0%	6.5%	61.0%
2006	0.5%	0.0%	0.0%	0.0%	0.0%	9.6%	6.4%	0.0%	11.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.6%	3.5%	0.0%	1.2%	27.5%	39.1%
2007	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	8.2%	0.0%	4.4%	0.0%	0.0%	0.0%	0.5%	0.0%	0.3%	1.1%	14.5%	0.0%	0.4%	23.6%	44.4%
1983-2007	0.4%	0.0%	0.0%	0.3%	0.4%	5.6%	5.6%	0.6%	13.9%	0.3%	4.4%	0.0%	1.0%	0.0%	0.1%	5.4%	12.2%	0.0%	1.8%	3.4%	44.8%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0.2%	0.0%	0.0%	0.8%	0.2%	4.4%	4.3%	1.6%	19.6%	0.9%	11.8%	0.0%	1.9%	0.0%	0.0%	14.0%	14.9%	0.0%	3.3%	0.0%	21.9%
1996-1998	0.3%	0.0%	0.0%	0.0%	1.7%	1.6%	8.8%	0.0%	14.3%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	1.9%	19.0%	0.0%	0.9%	0.0%	50.0%
1999-2007	0.4%	0.0%	0.0%	0.1%	0.2%	7.2%	5.8%	0.0%	10.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.1%	0.5%	8.8%	0.0%	0.9%	6.4%	58.9%



**Appendix C.30. Percent distribution of Skagit Spring Yearling total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo SI		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1985	0.0%	0.0%	0.0%	0.0%	0.0%	8.9%	0.0%	0.0%	29.2%	0.0%	25.4%	0.0%	0.0%	0.0%	0.0%	9.2%	18.5%	0.0%	0.0%	0.0%	10.8%
1986	1.8%	0.0%	0.0%	0.0%	0.0%	8.2%	5.8%	8.2%	36.4%	4.0%	9.3%	0.0%	0.0%	0.0%	0.0%	3.1%	9.3%	0.0%	0.0%	0.0%	19.0%
1987	0.0%	0.0%	0.0%	4.9%	0.0%	3.1%	0.0%	0.0%	7.4%	0.0%	9.2%	0.0%	1.2%	0.0%	0.0%	19.0%	39.9%	0.0%	0.0%	0.0%	15.3%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	9.3%	0.5%	17.1%	0.0%	12.8%	0.0%	2.1%	0.0%	0.0%	19.5%	16.2%	0.0%	0.0%	0.0%	20.3%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	1.9%	0.0%	19.5%	0.8%	3.4%	0.0%	4.7%	0.0%	0.0%	11.5%	10.4%	0.0%	16.7%	0.0%	26.9%
1990	0.0%	0.0%	0.0%	0.0%	1.1%	5.1%	8.6%	3.3%	11.5%	0.4%	5.8%	0.0%	3.7%	0.0%	0.0%	12.9%	24.3%	0.0%	1.8%	0.0%	21.7%
1997	0.3%	0.0%	0.0%	0.0%	0.5%	2.8%	9.1%	0.0%	19.5%	0.0%	3.8%	0.0%	0.0%	0.0%	0.0%	1.0%	31.2%	0.0%	0.8%	0.0%	31.4%
1998	0.7%	0.0%	0.0%	0.0%	3.9%	1.2%	7.2%	0.0%	10.1%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	2.3%	21.1%	0.0%	0.7%	0.0%	52.4%
1999	0.7%	0.0%	0.0%	0.0%	0.3%	1.2%	4.8%	0.0%	8.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.1%	12.6%	0.0%	1.2%	0.0%	71.2%
2000	0.7%	0.0%	0.0%	0.0%	0.9%	8.0%	2.8%	0.0%	16.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	20.0%	0.0%	0.5%	0.0%	52.1%
2001	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	2.2%	0.0%	11.8%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%	26.1%	0.0%	1.6%	0.0%	52.9%
2002	1.0%	0.0%	0.0%	0.0%	0.0%	1.0%	15.5%	0.0%	16.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	13.3%	0.0%	0.6%	0.0%	51.8%
2003	0.0%	0.0%	0.0%	0.9%	0.4%	19.9%	4.7%	0.0%	10.5%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.5%	10.2%	0.0%	0.2%	0.0%	52.5%
2004	0.2%	0.0%	0.0%	0.0%	1.1%	13.2%	4.1%	0.0%	8.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.2%	5.4%	0.0%	0.8%	0.1%	68.2%
2005	1.1%	0.0%	0.0%	0.2%	0.0%	7.5%	5.7%	0.0%	11.7%	0.0%	0.3%	0.0%	0.2%	0.0%	0.2%	0.1%	8.3%	0.0%	0.9%	6.9%	56.9%
2006	0.5%	0.0%	0.0%	0.0%	0.0%	9.5%	7.0%	0.0%	12.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.5%	6.9%	0.0%	1.1%	26.9%	34.5%
2007	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	8.2%	0.0%	4.8%	0.0%	0.0%	0.0%	0.5%	0.0%	0.2%	1.0%	17.3%	0.0%	0.4%	24.0%	41.2%
1983-2007	0.4%	0.0%	0.0%	0.4%	0.5%	5.8%	5.7%	0.8%	14.5%	0.3%	4.1%	0.0%	1.0%	0.0%	0.1%	4.9%	17.1%	0.0%	1.6%	3.4%	39.9%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0.3%	0.0%	0.0%	0.8%	0.2%	4.8%	4.3%	1.7%	20.0%	0.9%	10.9%	0.0%	2.0%	0.0%	0.0%	12.5%	19.8%	0.0%	3.1%	0.0%	19.0%
1996-1998	0.5%	0.0%	0.0%	0.0%	2.2%	1.9%	8.1%	0.0%	14.8%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	1.7%	26.2%	0.0%	0.7%	0.0%	41.9%
1999-2007	0.5%	0.0%	0.0%	0.1%	0.3%	7.0%	6.1%	0.0%	10.8%	0.0%	0.0%	0.0%	0.5%	0.0%	0.1%	0.4%	13.3%	0.0%	0.8%	6.4%	53.5%

**Appendix C.31. Percent distribution of So. Puget Sound Fall Yearling reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo St		Canada			WVOR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1982	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	0.0%	3.2%	2.5%	0.0%	0.0%	1.1%	0.0%	0.0%	12.0%	66.1%	0.0%	2.5%	1.4%	8.5%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	5.8%	0.0%	0.0%	0.5%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	9.9%	76.2%	0.0%	0.0%	0.0%	5.8%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	7.3%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	32.8%	43.3%	0.0%	0.8%	0.0%	14.2%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.2%	0.6%	0.0%	1.4%	0.0%	0.1%	33.1%	52.4%	0.0%	0.3%	0.6%	11.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	3.7%	0.0%	0.0%	12.6%	57.2%	0.0%	0.2%	0.4%	19.6%
1992	0.0%	0.0%	0.0%	0.0%	0.0%	4.6%	1.2%	0.0%	0.8%	0.0%	0.0%	0.0%	4.6%	0.0%	0.8%	27.4%	48.4%	0.0%	1.0%	0.0%	11.2%
1993	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	10.9%	52.5%	0.0%	0.0%	3.0%	29.4%
1994	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.7%	0.0%	0.5%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	16.5%	61.3%	0.0%	0.0%	0.0%	17.8%
1995	0.0%	0.0%	0.0%	0.0%	0.0%	6.4%	2.0%	0.0%	2.6%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	10.0%	66.8%	0.0%	0.4%	1.5%	10.0%
1996	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	1.7%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	2.9%	88.7%	0.0%	0.3%	0.6%	3.3%
1997	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.4%	0.0%	1.1%	0.0%	0.0%	0.0%	1.3%	0.0%	2.3%	4.0%	64.3%	0.0%	0.0%	0.0%	25.2%
1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	2.2%	82.2%	0.0%	3.3%	0.0%	10.0%
1999	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.4%	0.0%	0.0%	0.0%	7.7%	0.0%	0.0%	2.6%	69.2%	0.0%	0.0%	0.0%	5.1%
2000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%	0.0%	12.0%	70.7%	0.0%	0.0%	0.0%	6.7%
2001	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	74.6%	0.0%	0.0%	0.0%	17.9%
2002	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	83.3%	0.0%	0.0%	0.0%	16.7%
2004	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	10.7%	0.0%	0.0%	0.0%	86.4%
2005	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	1.2%	16.1%	53.5%	0.0%	3.1%	0.0%	24.0%
2006	0.0%	0.0%	0.0%	0.0%	0.0%	8.6%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	21.3%	29.6%	0.0%	3.0%	0.0%	30.7%
2007	0.0%	0.0%	0.0%	0.0%	0.0%	4.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	1.8%	14.2%	49.5%	0.0%	2.5%	0.0%	26.0%
1983-2007	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	0.7%	0.0%	1.5%	0.2%	0.1%	0.0%	2.0%	0.0%	0.3%	12.0%	60.0%	0.0%	0.9%	0.4%	19.0%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	0.0%	1.8%	1.4%	0.0%	0.0%	0.4%	0.0%	0.0%	18.2%	61.9%	0.0%	1.1%	0.5%	9.5%
1985-1995	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	0.6%	0.0%	1.0%	0.0%	0.5%	0.0%	1.9%	0.0%	0.1%	18.4%	56.4%	0.0%	0.3%	0.9%	16.5%
1996-1998	0.1%	0.0%	0.0%	0.0%	0.0%	0.5%	0.6%	0.0%	0.9%	0.0%	0.0%	0.0%	1.4%	0.0%	0.8%	3.0%	78.4%	0.0%	1.2%	0.2%	12.8%
1999-2007	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	1.2%	0.0%	1.9%	0.0%	0.0%	0.0%	2.9%	0.0%	0.4%	8.3%	55.1%	0.0%	1.1%	0.0%	26.7%

**Appendix C.32. Percent distribution of So. Puget Sound Fall Yearling total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM														Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1982	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%	0.0%	0.0%	2.7%	2.2%	0.0%	0.0%	0.8%	0.0%	0.0%	10.8%	70.3%	0.0%	1.9%	1.1%	6.5%	
1983	0.0%	0.0%	0.0%	0.0%	0.0%	5.5%	0.0%	0.0%	0.4%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	8.8%	78.8%	0.0%	0.0%	0.0%	4.7%	
1984	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	46.5%	0.0%	0.7%	0.0%	12.9%	
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.1%	0.1%	0.5%	0.0%	1.6%	0.0%	0.1%	31.3%	54.6%	0.0%	0.3%	0.7%	9.8%	
1991	0.0%	0.0%	0.0%	0.0%	0.0%	5.4%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	3.5%	0.0%	0.0%	11.3%	62.1%	0.0%	0.2%	0.3%	16.5%	
1992	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	1.2%	0.0%	0.9%	0.0%	0.0%	0.0%	4.8%	0.0%	0.7%	26.1%	50.9%	0.0%	0.9%	0.0%	9.6%	
1993	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	7.1%	71.9%	0.0%	0.0%	1.8%	15.8%	
1994	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.7%	0.0%	0.7%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	15.3%	65.1%	0.0%	0.0%	0.0%	14.8%	
1995	0.0%	0.0%	0.0%	0.0%	0.0%	5.9%	1.6%	0.0%	2.0%	0.0%	0.4%	0.0%	0.3%	0.0%	0.0%	7.9%	73.4%	0.0%	0.3%	1.3%	6.9%	
1996	0.5%	0.0%	0.0%	0.0%	0.0%	0.1%	1.2%	0.0%	1.9%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	2.6%	89.4%	0.0%	0.2%	0.6%	2.8%	
1997	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.3%	0.0%	1.0%	0.0%	0.0%	0.0%	1.2%	0.0%	2.1%	3.4%	69.9%	0.0%	0.0%	0.0%	20.6%	
1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	1.7%	86.1%	0.0%	2.6%	0.0%	7.8%	
1999	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.8%	0.0%	0.0%	0.0%	3.9%	0.0%	0.0%	1.0%	84.3%	0.0%	0.0%	0.0%	2.0%	
2000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	6.5%	0.0%	0.0%	9.7%	74.2%	0.0%	0.0%	0.0%	5.4%	
2001	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	81.3%	0.0%	0.0%	0.0%	13.2%	
2002	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	89.5%	0.0%	0.0%	0.0%	10.5%	
2004	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	10.7%	41.2%	0.0%	0.4%	0.0%	44.5%	
2005	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	1.3%	14.1%	60.1%	0.0%	2.6%	0.0%	19.6%	
2006	0.0%	0.0%	0.0%	0.0%	0.0%	6.6%	3.6%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	16.4%	47.0%	0.0%	2.2%	0.0%	22.4%	
2007	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	1.9%	13.1%	54.8%	0.0%	2.2%	0.0%	22.7%	
1983-2007	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	0.7%	0.0%	1.1%	0.2%	0.2%	0.0%	1.7%	0.0%	0.3%	11.1%	67.6%	0.0%	0.7%	0.3%	13.5%	
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	5.4%	0.0%	0.0%	1.7%	1.3%	0.0%	0.0%	0.3%	0.0%	0.0%	16.9%	65.2%	0.0%	0.9%	0.4%	8.0%	
1985-1995	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	0.6%	0.0%	0.9%	0.0%	0.5%	0.0%	1.9%	0.0%	0.1%	16.5%	63.0%	0.0%	0.3%	0.7%	12.3%	
1996-1998	0.2%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.0%	1.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.7%	2.6%	81.8%	0.0%	1.0%	0.2%	10.4%	
1999-2007	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	1.2%	0.0%	1.1%	0.0%	0.0%	0.0%	2.2%	0.0%	0.4%	8.1%	66.6%	0.0%	0.9%	0.0%	17.5%	

**Appendix C.33. Percent distribution of Samish Fall Fingerling reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM														Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1989	0 0%	0 0%	0 0%	0 2%	0 3%	6 8%	1 9%	0 9%	16 3%	0 2%	3 7%	0 0%	7 4%	0 0%	0 0%	36 2%	9 7%	0 0%	0 0%	0 0%	16 5%	
1990	2 1%	0 0%	0 0%	0 5%	0 0%	18 8%	2 0%	3 4%	9 8%	0 1%	1 5%	0 0%	9 1%	0 0%	0 1%	29 2%	7 4%	0 0%	0 3%	0 0%	15 6%	
1991	0 0%	0 0%	0 0%	0 0%	0 0%	13 4%	3 2%	1 7%	9 7%	0 1%	3 0%	0 0%	9 0%	0 0%	0 7%	21 7%	8 8%	0 0%	1 5%	1 3%	25 8%	
1992	0 0%	0 0%	0 0%	0 0%	0 5%	11 4%	0 9%	2 1%	12 5%	0 0%	2 3%	0 0%	10 2%	0 0%	0 7%	15 6%	15 8%	0 0%	0 0%	0 7%	27 4%	
1993	0 0%	0 0%	0 0%	0 3%	0 3%	12 1%	8 5%	2 8%	16 2%	0 2%	2 8%	0 0%	3 9%	0 0%	0 1%	16 5%	12 6%	0 0%	0 0%	0 0%	23 6%	
1994	0 2%	0 0%	0 0%	0 4%	0 0%	12 0%	5 4%	1 2%	12 6%	0 0%	2 3%	0 0%	2 2%	0 0%	0 0%	38 4%	3 5%	0 0%	0 0%	0 4%	21 2%	
1995	0 3%	0 0%	0 0%	0 0%	0 0%	5 8%	3 4%	0 0%	5 1%	0 0%	1 0%	0 0%	3 4%	0 0%	0 0%	27 2%	12 7%	0 0%	0 0%	2 3%	38 8%	
1996	0 0%	0 1%	0 0%	0 0%	0 0%	0 0%	0 7%	0 0%	10 7%	0 0%	0 5%	0 0%	1 9%	0 0%	0 0%	33 9%	9 6%	0 0%	0 0%	14 5%	28 1%	
1997	0 5%	0 2%	0 0%	0 3%	0 3%	2 0%	1 8%	0 0%	8 2%	0 7%	0 9%	0 0%	0 9%	0 0%	0 1%	34 5%	9 4%	0 0%	0 0%	0 3%	40 0%	
1998	3 3%	0 0%	0 0%	0 0%	0 0%	1 7%	1 7%	0 0%	10 9%	0 0%	0 0%	0 0%	0 7%	0 0%	0 0%	44 2%	3 5%	0 0%	0 0%	0 6%	33 3%	
1999	3 7%	0 0%	0 0%	1 2%	3 3%	1 6%	10 2%	0 0%	11 0%	0 0%	0 0%	0 0%	1 6%	0 0%	0 0%	38 6%	3 7%	0 0%	0 0%	0 0%	25 2%	
2000	0 0%	0 0%	0 0%	0 0%	0 0%	11 4%	9 8%	0 0%	6 4%	0 0%	0 0%	0 0%	0 4%	0 0%	0 0%	37 5%	1 5%	0 0%	0 0%	0 0%	33 0%	
2001	0 0%	0 3%	0 0%	0 0%	0 3%	5 2%	5 2%	0 0%	7 5%	0 0%	0 1%	0 0%	2 4%	0 0%	0 1%	39 2%	4 0%	0 0%	0 5%	0 0%	35 4%	
2002	0 8%	0 0%	0 0%	0 7%	0 0%	8 7%	6 7%	0 0%	7 0%	0 0%	0 0%	0 0%	2 8%	0 0%	0 6%	36 4%	4 4%	0 0%	0 3%	0 0%	31 5%	
2003	0 8%	0 0%	0 0%	0 0%	0 0%	13 6%	2 6%	0 0%	5 1%	0 0%	0 3%	0 0%	6 2%	0 0%	0 5%	38 7%	2 2%	0 0%	0 3%	0 0%	29 8%	
2004	0 4%	0 0%	0 0%	0 0%	0 0%	7 7%	6 3%	0 0%	4 9%	0 0%	0 0%	0 0%	10 5%	0 0%	0 4%	30 2%	5 9%	0 0%	1 2%	0 0%	32 5%	
2005	0 3%	0 2%	0 0%	0 3%	0 0%	11 3%	7 6%	0 0%	12 8%	0 0%	0 0%	0 0%	7 1%	0 0%	0 8%	33 9%	3 5%	0 0%	0 9%	0 0%	21 4%	
2006	0 8%	0 1%	0 0%	0 1%	0 0%	8 2%	5 3%	0 0%	5 4%	0 0%	0 0%	0 0%	6 0%	0 0%	1 2%	51 4%	5 9%	0 0%	0 5%	0 0%	15 1%	
2007	0 5%	0 0%	0 0%	0 0%	0 0%	9 4%	4 5%	0 0%	5 9%	0 0%	0 0%	0 0%	2 6%	0 0%	0 3%	31 1%	3 2%	0 0%	0 6%	18 5%	23 3%	
1983-2007	0 7%	0 0%	0 0%	0 2%	0 3%	8 5%	4 6%	0 6%	9 4%	0 1%	1 0%	0 0%	4 7%	0 0%	0 3%	33 4%	6 7%	0 0%	0 3%	2 0%	27 2%	
1979-1984	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	
1985-1995	0 4%	0 0%	0 0%	0 2%	0 2%	11 5%	3 6%	1 7%	11 7%	0 1%	2 4%	0 0%	6 5%	0 0%	0 2%	26 4%	10 1%	0 0%	0 3%	0 7%	24 1%	
1996-1998	1 3%	0 1%	0 0%	0 1%	0 1%	1 3%	1 4%	0 0%	9 9%	0 2%	0 4%	0 0%	1 2%	0 0%	0 0%	37 5%	7 5%	0 0%	0 0%	5 1%	33 8%	
1999-2007	0 8%	0 1%	0 0%	0 3%	0 4%	8 6%	6 5%	0 0%	7 3%	0 0%	0 0%	0 0%	4 4%	0 0%	0 4%	37 4%	3 8%	0 0%	0 5%	2 1%	27 5%	

**Appendix C.34. Percent distribution of Samish Fall Fingerling total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM												Esc.	
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net		Sport
1989	0.2%	0.0%	0.0%	0.2%	0.2%	9.1%	1.8%	1.3%	17.1%	0.2%	3.3%	0.0%	8.0%	0.0%	0.0%	33.2%	11.0%	0.0%	0.0%	0.0%	14.3%
1990	2.2%	0.0%	0.0%	0.5%	0.0%	20.2%	2.0%	3.5%	10.2%	0.1%	1.5%	0.0%	9.4%	0.0%	0.1%	27.4%	8.1%	0.0%	0.3%	0.0%	14.4%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	14.5%	3.2%	2.0%	10.4%	0.1%	2.9%	0.0%	9.4%	0.0%	0.8%	20.4%	10.0%	0.0%	1.4%	1.3%	23.6%
1992	0.0%	0.0%	0.0%	0.0%	0.6%	11.6%	0.8%	2.5%	12.8%	0.0%	1.9%	0.0%	9.9%	0.0%	0.7%	14.2%	22.4%	0.0%	0.0%	0.7%	21.8%
1993	0.0%	0.0%	0.0%	0.3%	0.3%	13.8%	8.0%	3.8%	17.9%	0.2%	2.5%	0.0%	4.1%	0.0%	0.1%	15.3%	13.5%	0.0%	0.0%	0.0%	20.1%
1994	0.5%	0.0%	0.0%	0.5%	0.0%	13.2%	5.5%	1.4%	13.7%	0.0%	2.3%	0.0%	2.1%	0.0%	0.0%	36.9%	4.2%	0.0%	0.0%	0.4%	19.2%
1995	0.2%	0.0%	0.0%	0.0%	0.0%	7.3%	3.3%	0.0%	5.3%	0.0%	1.6%	0.0%	3.0%	0.0%	0.0%	24.3%	20.4%	0.0%	0.0%	2.2%	32.3%
1996	0.0%	0.1%	0.0%	0.1%	0.0%	1.0%	0.7%	0.0%	11.4%	0.0%	0.6%	0.0%	1.7%	0.0%	0.0%	32.6%	14.3%	0.0%	0.0%	14.6%	22.9%
1997	0.6%	0.4%	0.0%	0.4%	0.4%	2.5%	1.7%	0.0%	9.3%	0.8%	1.1%	0.0%	1.1%	0.0%	0.1%	33.6%	11.3%	0.0%	0.0%	0.4%	36.5%
1998	3.6%	0.0%	0.0%	0.0%	0.0%	1.7%	1.8%	0.0%	11.9%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	43.2%	5.0%	0.0%	0.0%	0.6%	31.6%
1999	4.0%	0.0%	0.0%	1.5%	3.6%	1.5%	10.5%	0.0%	12.4%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	36.4%	5.8%	0.0%	0.0%	0.0%	22.5%
2000	0.0%	0.0%	0.0%	0.0%	0.0%	10.4%	9.5%	0.0%	6.8%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	40.2%	6.8%	0.0%	0.0%	0.0%	25.9%
2001	0.0%	0.7%	0.0%	0.0%	0.3%	4.8%	5.3%	0.0%	8.6%	0.0%	0.2%	0.0%	2.7%	0.0%	0.1%	37.7%	7.8%	0.0%	0.4%	0.0%	31.3%
2002	0.9%	0.0%	0.0%	0.7%	0.0%	8.4%	7.3%	0.0%	7.6%	0.0%	0.0%	0.0%	3.0%	0.0%	0.6%	35.4%	6.1%	0.0%	0.3%	0.0%	29.7%
2003	0.9%	0.0%	0.0%	0.0%	0.0%	13.8%	3.1%	0.0%	5.7%	0.0%	0.3%	0.0%	6.6%	0.0%	0.5%	37.4%	3.1%	0.0%	0.3%	0.0%	28.3%
2004	0.5%	0.0%	0.0%	0.0%	0.0%	7.6%	6.7%	0.0%	5.4%	0.0%	0.0%	0.0%	11.9%	0.0%	0.4%	28.8%	8.7%	0.0%	1.1%	0.0%	28.9%
2005	0.4%	0.1%	0.0%	0.4%	0.0%	10.9%	7.9%	0.0%	14.0%	0.0%	0.0%	0.0%	7.5%	0.0%	0.8%	32.6%	6.3%	0.0%	0.8%	0.0%	18.3%
2006	0.9%	0.1%	0.0%	0.1%	0.0%	8.0%	5.6%	0.0%	6.1%	0.0%	0.0%	0.0%	6.6%	0.0%	1.2%	49.6%	8.1%	0.0%	0.4%	0.0%	13.3%
2007	0.6%	0.0%	0.0%	0.0%	0.0%	8.8%	4.5%	0.0%	6.1%	0.0%	0.0%	0.0%	2.7%	0.0%	0.4%	30.2%	9.7%	0.0%	0.5%	17.8%	18.8%
1983-2007	0.8%	0.1%	0.0%	0.3%	0.3%	8.9%	4.7%	0.8%	10.2%	0.1%	1.0%	0.0%	4.9%	0.0%	0.3%	32.1%	9.6%	0.0%	0.3%	2.0%	23.9%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0.4%	0.0%	0.0%	0.2%	0.2%	12.8%	3.5%	2.0%	12.5%	0.1%	2.3%	0.0%	6.6%	0.0%	0.2%	24.5%	12.8%	0.0%	0.2%	0.6%	20.8%
1996-1998	1.4%	0.2%	0.0%	0.1%	0.1%	1.7%	1.4%	0.0%	10.9%	0.3%	0.6%	0.0%	1.2%	0.0%	0.0%	36.4%	10.2%	0.0%	0.0%	5.2%	30.3%
1999-2007	0.9%	0.1%	0.0%	0.3%	0.4%	8.2%	6.7%	0.0%	8.1%	0.0%	0.1%	0.0%	4.8%	0.0%	0.4%	36.5%	6.9%	0.0%	0.4%	2.0%	24.1%



Appendix C.35. Percent distribution of Skagit Summer Fingerling reported catch among fisheries and escapement.

Catch Year	AABM							ISBM														Esc.
	SEAK			NSC		WCVI		Geo SI			Canada			WVOR coast			Puget Sound		Terminal			
	Trawl	Net	Sport	Trawl	Sport	Trawl	Sport	Trawl	Sport	Trawl	Net	Sport	Trawl	Net	Sport	Net	Sport	Trawl	Net	Sport		
1988	3.5%	0.0%	0.0%	0.0%	1.7%	1.7%	2.9%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	87.3%	
1989	7.1%	2.4%	0.0%	0.0%	0.0%	0.0%	20.2%	0.0%	7.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	81.9%	
2000	5.9%	0.9%	0.0%	0.0%	0.0%	2.3%	7.8%	0.0%	6.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	5.5%	0.0%	0.0%	0.0%	88.5%	
2001	6.9%	1.8%	0.9%	0.0%	1.6%	7.5%	6.3%	0.0%	8.7%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.3%	1.3%	0.0%	0.5%	0.0%	84.1%	
2002	12.6%	0.0%	0.8%	1.4%	1.6%	6.4%	1.7%	0.0%	3.9%	0.0%	0.3%	0.0%	0.1%	0.0%	0.0%	0.2%	0.0%	0.0%	0.7%	0.0%	70.2%	
2003	6.2%	0.1%	0.0%	3.8%	3.2%	10.8%	3.7%	0.0%	6.0%	0.0%	0.1%	0.0%	0.4%	0.0%	0.4%	0.5%	0.4%	0.0%	0.2%	0.0%	84.2%	
2004	4.9%	0.0%	0.0%	2.3%	1.2%	10.7%	1.2%	0.0%	1.6%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	1.0%	0.5%	0.0%	0.0%	0.0%	75.8%	
2005	7.4%	0.2%	0.4%	1.4%	3.2%	7.0%	4.0%	0.0%	1.8%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.7%	0.0%	3.8%	0.2%	89.3%	
2006	3.1%	1.0%	0.1%	0.5%	3.6%	4.0%	3.1%	0.0%	2.0%	0.0%	0.1%	0.0%	0.4%	0.0%	0.0%	0.2%	0.5%	0.0%	3.0%	0.0%	78.3%	
2007	5.3%	0.3%	0.1%	1.0%	1.3%	8.3%	3.4%	0.0%	0.6%	0.0%	0.1%	0.0%	0.8%	0.0%	0.0%	0.2%	0.3%	0.0%	2.8%	0.0%	75.5%	
1983-2007	6.3%	0.7%	0.2%	1.1%	1.7%	5.9%	5.4%	0.0%	4.0%	0.0%	0.1%	0.0%	0.3%	0.0%	0.0%	0.5%	1.0%	0.0%	1.2%	0.0%	71.5%	
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
1985-1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
1996-1998	3.5%	0.0%	0.0%	0.0%	1.7%	1.7%	2.9%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	87.3%	
1999-2007	6.6%	0.6%	0.3%	1.2%	1.7%	6.3%	5.7%	0.0%	4.3%	0.0%	0.1%	0.0%	0.3%	0.0%	0.0%	0.5%	1.0%	0.0%	1.4%	0.0%	88.8%	



**Appendix C.36. Percent distribution of Skagit Summer Fingerling total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.	
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1998	3.9%	0.0%	0.0%	0.0%	2.2%	1.7%	2.8%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	84.8%	
1999	10.1%	4.3%	0.0%	0.0%	0.0%	0.0%	20.7%	0.0%	8.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	55.3%	
2000	10.4%	1.1%	0.0%	0.0%	0.0%	3.4%	7.8%	0.0%	7.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	11.9%	0.0%	0.0%	0.0%	56.0%	
2001	9.8%	4.4%	1.0%	0.0%	1.8%	6.9%	6.5%	0.0%	9.6%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%	2.7%	0.0%	0.5%	0.0%	56.5%	
2002	13.3%	0.0%	0.9%	1.5%	1.9%	6.3%	1.8%	0.0%	4.2%	0.0%	2.9%	0.0%	0.1%	0.0%	0.0%	0.2%	0.0%	0.0%	0.7%	0.0%	66.3%	
2003	6.8%	0.6%	0.0%	4.2%	4.1%	10.9%	4.5%	0.0%	6.5%	0.0%	0.2%	0.0%	0.3%	0.0%	0.3%	0.5%	0.5%	0.0%	0.2%	0.0%	60.5%	
2004	5.6%	0.0%	0.0%	2.8%	1.8%	11.0%	1.4%	0.0%	1.9%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.9%	0.7%	0.0%	0.0%	0.0%	73.0%	
2005	8.8%	0.3%	0.6%	1.7%	4.1%	7.1%	4.5%	0.0%	2.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.1%	1.1%	0.0%	3.7%	0.2%	65.3%	
2006	3.5%	1.2%	0.2%	0.6%	4.5%	4.2%	3.5%	0.0%	2.3%	0.0%	0.1%	0.0%	0.5%	0.0%	0.0%	0.2%	0.8%	0.0%	3.0%	0.0%	75.4%	
2007	6.6%	1.1%	0.2%	1.1%	1.4%	8.2%	3.5%	0.0%	0.7%	0.0%	0.1%	0.0%	0.9%	0.0%	0.0%	0.2%	0.5%	0.0%	2.8%	0.0%	72.8%	
1983-2007	7.9%	1.3%	0.3%	1.2%	2.2%	6.0%	5.7%	0.0%	4.6%	0.0%	0.4%	0.0%	0.3%	0.0%	0.0%	0.4%	2.0%	0.0%	1.2%	0.0%	66.6%	
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
1985-1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
1996-1998	3.9%	0.0%	0.0%	0.0%	2.2%	1.7%	2.8%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	84.8%	
1999-2007	8.3%	1.4%	0.3%	1.3%	2.2%	6.5%	6.0%	0.0%	4.8%	0.0%	0.4%	0.0%	0.3%	0.0%	0.0%	0.5%	2.0%	0.0%	1.3%	0.0%	64.6%	

**Appendix C.37. Percent distribution of Stillaguamish Fall Fingerling reported catch among fisheries and escapement.**

Catch Year	AASB							ISBM													Esc.
	SEAK		NBC		WCW			Geo SI		Canada			WV/OR coast			Puget Sound		Terminal			
	Trawl	Net	Sport	Trawl	Sport	Trawl	Sport	Trawl	Sport	Trawl	Net	Sport	Trawl	Net	Sport	Net	Sport	Trawl	Net	Sport	
1984	0.0%	0.0%	0.0%	3.6%	3.6%	7.2%	0.0%	0.0%	15.7%	19.3%	26.5%	0.0%	0.0%	0.0%	0.0%	4.8%	19.3%	0.0%	0.0%	0.0%	0.0%
1985	7.3%	0.0%	0.0%	4.2%	0.0%	29.2%	9.4%	0.0%	10.4%	0.0%	15.6%	0.0%	0.0%	0.0%	0.0%	9.4%	13.5%	0.0%	0.0%	0.0%	1.0%
1986	4.5%	0.0%	0.0%	0.0%	0.0%	32.6%	0.0%	0.0%	20.2%	0.0%	4.5%	0.0%	0.0%	0.0%	0.0%	16.9%	21.3%	0.0%	0.0%	0.0%	0.0%
1990	0.6%	0.0%	0.0%	0.9%	0.0%	21.2%	6.5%	0.6%	9.4%	8.0%	10.9%	0.0%	5.6%	0.0%	0.0%	7.4%	13.6%	0.0%	2.1%	0.0%	13.3%
1991	0.2%	0.0%	0.0%	0.0%	0.4%	4.7%	2.1%	0.0%	3.6%	0.0%	1.0%	0.0%	4.3%	0.0%	0.0%	3.7%	6.5%	0.0%	1.9%	0.0%	71.7%
1992	0.0%	0.0%	0.0%	0.5%	0.0%	18.1%	4.2%	0.0%	5.3%	0.0%	5.2%	0.0%	6.0%	0.0%	0.0%	10.2%	29.6%	0.0%	2.4%	0.0%	18.6%
1993	0.0%	0.0%	0.0%	0.6%	1.3%	11.3%	9.4%	0.2%	8.3%	0.4%	2.3%	0.0%	5.3%	0.0%	0.4%	0.5%	20.2%	0.0%	1.0%	0.0%	38.7%
1994	2.4%	0.0%	0.0%	0.7%	0.0%	6.7%	5.3%	0.0%	7.8%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	2.2%	5.8%	0.0%	0.2%	0.0%	66.7%
1995	2.4%	0.0%	0.0%	0.0%	0.0%	2.4%	9.8%	0.0%	4.2%	0.0%	10.6%	0.0%	1.1%	0.0%	0.0%	2.1%	14.0%	0.0%	0.3%	0.0%	52.9%
1996	0.9%	0.0%	0.0%	0.0%	1.3%	0.0%	7.2%	0.0%	5.9%	0.0%	8.2%	0.0%	0.0%	0.0%	0.0%	0.0%	18.4%	0.0%	0.3%	0.0%	57.7%
1997	9.0%	0.4%	0.0%	0.5%	1.0%	6.9%	5.0%	0.0%	4.7%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	1.4%	15.3%	0.0%	0.5%	0.0%	53.8%
1998	9.3%	0.2%	0.3%	1.0%	0.6%	1.0%	2.1%	0.0%	1.6%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	1.4%	1.9%	0.0%	0.3%	0.0%	80.2%
1999	0.6%	1.5%	0.0%	0.0%	0.3%	1.1%	7.4%	0.0%	5.7%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.3%	2.5%	0.0%	0.2%	0.0%	79.9%
2000	3.8%	0.0%	0.0%	0.0%	0.0%	5.5%	1.2%	0.0%	1.5%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	1.4%	0.0%	0.1%	0.0%	86.2%
2001	2.1%	0.0%	0.0%	0.0%	0.0%	5.3%	4.2%	0.0%	4.6%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	1.1%	10.2%	0.0%	0.4%	0.0%	71.9%
2006	2.2%	0.0%	0.0%	0.0%	1.0%	11.2%	1.0%	0.0%	2.5%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	1.6%	3.2%	0.0%	0.6%	0.0%	76.0%
2007	0.6%	0.5%	0.0%	0.0%	0.0%	15.6%	5.8%	0.0%	8.9%	0.0%	0.5%	0.0%	1.7%	0.0%	0.0%	4.3%	4.9%	0.0%	0.6%	0.0%	56.6%
1983-2007	2.7%	0.2%	0.0%	0.7%	0.6%	10.6%	4.7%	0.0%	7.1%	1.6%	5.3%	0.0%	1.5%	0.0%	0.0%	4.0%	11.8%	0.0%	0.6%	0.0%	48.5%
1979-1984	0.0%	0.0%	0.0%	3.6%	3.6%	7.2%	0.0%	0.0%	15.7%	19.3%	26.5%	0.0%	0.0%	0.0%	0.0%	4.8%	19.3%	0.0%	0.0%	0.0%	0.0%
1985-1995	2.2%	0.0%	0.0%	0.9%	0.2%	15.8%	5.8%	0.1%	8.7%	1.0%	6.6%	0.0%	2.8%	0.0%	0.0%	6.5%	15.6%	0.0%	1.0%	0.0%	32.9%
1996-1998	6.4%	0.2%	0.1%	0.5%	1.0%	2.6%	4.8%	0.0%	4.1%	0.0%	3.3%	0.0%	0.0%	0.0%	0.0%	1.0%	11.9%	0.0%	0.4%	0.0%	63.9%
1999-2007	1.9%	0.4%	0.0%	0.0%	0.3%	7.7%	3.9%	0.0%	4.6%	0.0%	0.2%	0.0%	0.6%	0.0%	0.0%	1.5%	4.4%	0.0%	0.4%	0.0%	74.1%

**Appendix C.38. Percent distribution of Stillaguamish Fall Fingerling total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1984	0.9%	0.0%	0.0%	3.7%	2.8%	10.3%	0.0%	0.0%	13.1%	16.8%	21.5%	0.0%	0.0%	0.0%	0.0%	4.7%	26.2%	0.0%	0.0%	0.0%	0.0%
1985	7.1%	0.0%	0.0%	4.4%	0.0%	30.1%	8.8%	0.0%	8.8%	0.0%	13.3%	0.0%	0.0%	0.0%	0.0%	8.8%	17.7%	0.0%	0.0%	0.0%	0.9%
1986	6.2%	0.0%	0.0%	0.0%	0.0%	32.0%	0.0%	0.0%	20.6%	0.0%	4.1%	0.0%	0.0%	0.0%	0.0%	15.5%	21.6%	0.0%	0.0%	0.0%	0.0%
1990	0.7%	0.0%	0.0%	1.0%	0.2%	21.4%	6.1%	0.7%	9.7%	7.8%	9.5%	0.0%	6.6%	0.0%	0.0%	7.1%	16.5%	0.0%	1.7%	0.0%	10.9%
1991	0.2%	0.0%	0.0%	0.0%	0.4%	5.5%	2.3%	0.0%	4.2%	0.0%	0.9%	0.0%	4.9%	0.0%	0.0%	3.7%	8.4%	0.0%	1.9%	0.0%	67.7%
1992	0.0%	0.0%	0.0%	0.4%	0.0%	17.9%	3.7%	0.0%	5.3%	0.0%	4.1%	0.0%	5.7%	0.0%	0.0%	9.1%	38.9%	0.0%	1.8%	0.0%	13.2%
1993	0.0%	0.0%	0.0%	0.9%	1.3%	13.5%	9.1%	0.3%	9.5%	0.5%	2.2%	0.0%	5.8%	0.0%	0.3%	0.4%	21.3%	0.0%	0.9%	0.0%	34.1%
1994	2.9%	0.0%	0.0%	0.6%	0.0%	7.3%	5.7%	0.0%	8.6%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	2.1%	7.1%	0.0%	0.2%	0.0%	63.1%
1995	2.4%	0.0%	0.0%	0.0%	0.0%	3.8%	9.0%	0.0%	4.4%	0.0%	12.6%	0.0%	0.8%	0.0%	0.0%	2.0%	24.8%	0.0%	0.2%	0.0%	40.0%
1996	1.1%	0.0%	0.0%	0.0%	1.1%	1.1%	7.0%	0.0%	6.4%	0.0%	9.4%	0.0%	0.0%	0.0%	0.0%	0.0%	25.8%	0.0%	0.2%	0.0%	48.0%
1997	9.7%	0.8%	0.0%	0.5%	1.3%	7.7%	4.8%	0.0%	5.0%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	1.3%	18.3%	0.0%	0.5%	0.0%	48.4%
1998	10.5%	0.7%	0.4%	1.6%	0.8%	0.9%	2.3%	0.0%	1.8%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	1.5%	2.9%	0.0%	0.3%	0.0%	76.2%
1999	0.7%	7.1%	0.0%	0.0%	0.3%	1.0%	7.5%	0.0%	6.2%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.3%	3.5%	0.0%	0.1%	0.0%	72.9%
2000	4.4%	0.0%	0.0%	0.0%	0.0%	5.7%	1.2%	0.0%	1.7%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	2.3%	0.0%	0.1%	0.0%	84.2%
2001	1.9%	0.0%	0.0%	0.0%	0.0%	5.2%	4.2%	0.0%	4.5%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	1.0%	15.9%	0.0%	0.3%	0.0%	66.6%
2006	2.4%	0.0%	0.0%	0.0%	1.1%	11.4%	1.2%	0.0%	3.2%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	1.7%	4.7%	0.0%	0.6%	0.0%	72.9%
2007	1.2%	1.1%	0.0%	0.0%	0.0%	15.6%	6.1%	0.0%	10.5%	0.0%	0.8%	0.0%	1.9%	0.0%	0.0%	4.4%	9.0%	0.0%	0.5%	0.0%	48.9%
1983-2007	3.1%	0.6%	0.0%	0.8%	0.5%	11.2%	4.6%	0.1%	7.3%	1.5%	4.9%	0.0%	1.6%	0.0%	0.0%	3.7%	15.6%	0.0%	0.5%	0.0%	44.0%
1979-1984	0.9%	0.0%	0.0%	3.7%	2.8%	10.3%	0.0%	0.0%	13.1%	16.8%	21.5%	0.0%	0.0%	0.0%	0.0%	4.7%	26.2%	0.0%	0.0%	0.0%	0.0%
1985-1995	2.4%	0.0%	0.0%	0.9%	0.2%	16.4%	5.6%	0.1%	8.9%	1.0%	6.1%	0.0%	3.0%	0.0%	0.0%	6.1%	19.5%	0.0%	0.8%	0.0%	28.7%
1996-1998	7.1%	0.5%	0.1%	0.7%	1.1%	3.2%	4.7%	0.0%	4.4%	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	0.9%	15.6%	0.0%	0.3%	0.0%	57.5%
1999-2007	2.1%	1.6%	0.0%	0.0%	0.3%	7.8%	4.1%	0.0%	5.2%	0.0%	0.2%	0.0%	0.7%	0.0%	0.0%	1.5%	7.1%	0.0%	0.3%	0.0%	69.1%

**Appendix C.39. Percent distribution of Nisqually Fall Fingerling reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1983	0 0%	0 0%	0 0%	2 5%	0 0%	14 7%	0 0%	2 5%	10 2%	0 0%	6 1%	0 0%	4 6%	0 0%	0 0%	10 2%	46 7%	0 0%	1 0%	0 0%	1 5%
1984	0 0%	0 0%	0 0%	0 0%	0 0%	31 2%	0 0%	0 0%	1 5%	0 0%	2 4%	0 0%	1 5%	0 0%	0 0%	15 6%	21 0%	0 0%	21 0%	0 0%	5 9%
1985	0 0%	0 0%	0 0%	0 0%	0 0%	30 3%	3 0%	0 0%	0 0%	0 0%	6 1%	0 0%	7 6%	0 0%	0 0%	21 2%	16 7%	0 0%	10 6%	0 0%	4 5%
1986	0 0%	0 0%	0 0%	0 0%	0 0%	15 7%	0 0%	0 0%	13 0%	0 0%	1 7%	0 0%	0 0%	0 0%	0 0%	12 2%	14 8%	0 0%	23 5%	0 0%	19 1%
1987	0 0%	0 0%	0 0%	0 0%	0 0%	10 7%	0 0%	1 3%	12 0%	2 0%	2 0%	0 0%	5 3%	0 0%	0 0%	2 0%	16 0%	0 0%	33 3%	2 7%	12 7%
1988	0 0%	0 0%	0 0%	0 7%	2 2%	5 4%	0 0%	4 0%	13 7%	2 2%	5 4%	0 0%	8 7%	0 0%	0 0%	7 2%	10 5%	0 0%	10 1%	0 0%	30 0%
1989	0 0%	0 0%	0 0%	0 3%	0 0%	4 4%	6 3%	0 0%	2 5%	0 0%	4 3%	0 0%	13 3%	2 1%	0 4%	12 4%	17 5%	0 0%	28 1%	0 4%	8 0%
1990	0 0%	0 0%	0 0%	0 0%	0 0%	22 6%	5 8%	0 0%	3 1%	0 2%	0 2%	0 0%	10 2%	0 0%	0 1%	2 1%	11 7%	0 0%	35 8%	0 0%	8 2%
1991	0 0%	0 0%	0 0%	2 1%	0 0%	8 2%	2 1%	0 0%	3 3%	0 0%	2 5%	0 0%	16 5%	0 0%	0 8%	6 6%	23 5%	0 0%	16 5%	0 0%	18 1%
1992	0 0%	0 0%	0 0%	0 0%	0 8%	7 6%	4 2%	0 0%	2 9%	0 0%	2 9%	0 0%	7 6%	0 0%	0 0%	10 2%	16 7%	0 0%	8 1%	0 0%	39 3%
1993	0 0%	0 0%	0 0%	0 0%	0 0%	12 5%	1 9%	0 3%	3 5%	0 0%	3 2%	0 0%	2 9%	0 0%	0 7%	3 4%	18 4%	0 0%	19 0%	0 0%	34 3%
1994	0 0%	0 0%	0 0%	0 0%	0 0%	4 6%	0 5%	0 0%	2 4%	0 0%	2 5%	0 0%	0 8%	0 0%	0 0%	5 2%	19 9%	0 0%	17 0%	0 4%	46 7%
1995	0 0%	0 0%	0 0%	0 0%	0 3%	5 4%	3 1%	0 0%	1 7%	0 0%	0 4%	0 0%	2 7%	0 0%	0 0%	1 5%	24 4%	0 0%	30 8%	0 0%	29 6%
1996	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	1 1%	0 0%	3 3%	0 0%	1 0%	0 0%	1 7%	0 0%	0 0%	1 6%	21 3%	0 0%	40 5%	0 0%	29 4%
1997	0 0%	0 3%	0 0%	0 0%	0 6%	2 4%	4 5%	0 0%	0 6%	0 0%	0 3%	0 0%	0 8%	0 0%	1 0%	0 8%	22 1%	0 0%	18 1%	1 3%	47 0%
1998	0 2%	0 0%	0 0%	0 0%	0 4%	0 5%	0 7%	0 0%	1 5%	0 0%	0 0%	0 0%	0 5%	0 0%	0 0%	0 5%	11 3%	0 0%	35 9%	0 7%	47 9%
1999	0 0%	0 0%	0 0%	0 0%	0 0%	0 4%	2 7%	0 0%	2 9%	0 0%	0 0%	0 0%	2 8%	0 0%	0 3%	1 3%	19 0%	0 0%	42 7%	0 0%	27 8%
2000	0 0%	0 0%	0 0%	0 0%	0 0%	13 9%	2 8%	0 0%	3 0%	0 0%	0 0%	0 0%	1 8%	0 0%	1 6%	2 6%	16 0%	0 0%	44 0%	0 0%	14 3%
2001	0 2%	0 0%	0 0%	0 0%	0 0%	3 2%	2 9%	0 0%	1 3%	0 0%	0 0%	0 0%	4 2%	0 0%	0 4%	0 4%	15 4%	0 0%	29 2%	0 0%	42 6%
2002	0 0%	0 0%	0 0%	0 0%	0 0%	6 9%	3 4%	0 0%	0 8%	0 0%	0 0%	0 0%	3 4%	0 0%	0 6%	0 6%	7 9%	0 0%	41 2%	3 2%	32 1%
2003	0 1%	0 0%	0 0%	0 0%	0 6%	5 5%	1 6%	0 0%	1 1%	0 0%	0 0%	0 0%	4 3%	0 0%	0 0%	0 4%	11 2%	0 0%	43 5%	1 8%	29 9%
2004	0 0%	0 1%	0 0%	0 0%	0 0%	5 9%	1 1%	0 0%	1 2%	0 0%	0 0%	0 0%	6 7%	0 0%	0 6%	0 6%	8 1%	0 0%	31 2%	0 0%	44 5%
2005	0 0%	0 0%	0 0%	0 0%	0 0%	5 5%	2 0%	0 0%	3 5%	0 0%	0 3%	0 0%	3 7%	0 0%	1 9%	0 6%	5 8%	0 0%	10 4%	0 0%	66 4%
2006	0 1%	0 0%	0 0%	0 0%	0 0%	6 3%	1 7%	0 0%	1 7%	0 0%	0 0%	0 0%	5 0%	0 0%	0 3%	0 8%	5 7%	0 0%	39 0%	0 0%	39 5%
2007	0 0%	0 0%	0 0%	0 1%	0 0%	10 0%	1 4%	0 0%	0 8%	0 0%	0 0%	0 0%	4 4%	0 0%	0 3%	0 8%	10 5%	0 0%	35 7%	0 0%	36 0%
1983-2007	0 0%	0 0%	0 0%	0 2%	0 2%	9 3%	2 1%	0 3%	3 7%	0 2%	1 6%	0 0%	4 8%	0 1%	0 4%	4 8%	16 5%	0 0%	26 7%	0 4%	28 6%
1979-1984	0 0%	0 0%	0 0%	1 3%	0 0%	23 0%	0 0%	1 3%	5 8%	0 0%	4 3%	0 0%	3 0%	0 0%	0 0%	12 9%	33 8%	0 0%	11 0%	0 0%	3 7%
1985-1995	0 0%	0 0%	0 0%	0 3%	0 3%	11 6%	2 4%	0 5%	5 3%	0 4%	2 8%	0 0%	6 9%	0 2%	0 2%	7 6%	17 3%	0 0%	21 2%	0 3%	22 8%
1996-1998	0 1%	0 1%	0 0%	0 0%	0 3%	1 0%	2 1%	0 0%	1 8%	0 0%	0 5%	0 0%	1 0%	0 0%	0 3%	0 9%	18 2%	0 0%	31 5%	0 7%	41 4%
1999-2007	0 0%	0 0%	0 0%	0 0%	0 1%	6 4%	2 2%	0 0%	1 8%	0 0%	0 0%	0 0%	4 1%	0 0%	0 7%	0 9%	11 1%	0 0%	35 2%	0 5%	37 0%

**Appendix C.40. Percent distribution of Nisqually Fall Fingerling total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1983	0 0%	0 0%	0 0%	1 7%	0 0%	13 9%	0 0%	1 7%	7 3%	0 0%	4 9%	0 0%	3 1%	0 0%	0 0%	8 4%	56 8%	0 0%	1 0%	0 0%	1 0%
1984	0 0%	0 0%	0 0%	0 0%	0 0%	31 1%	0 0%	0 0%	1 2%	0 0%	2 5%	0 0%	1 6%	0 0%	0 0%	15 2%	24 6%	0 0%	18 9%	0 0%	4 9%
1985	0 0%	0 0%	0 0%	0 0%	0 0%	28 6%	3 6%	0 0%	0 0%	0 0%	4 8%	0 0%	7 1%	0 0%	0 0%	21 4%	21 4%	0 0%	9 5%	0 0%	3 6%
1986	0 0%	0 0%	0 0%	0 0%	0 0%	16 4%	0 0%	0 0%	12 5%	0 0%	1 6%	0 0%	0 0%	0 0%	0 0%	10 9%	19 5%	0 0%	21 9%	0 0%	17 2%
1987	0 0%	0 0%	0 0%	0 0%	0 0%	14 4%	0 0%	1 1%	10 7%	2 7%	1 6%	0 0%	5 9%	0 0%	0 0%	1 6%	21 4%	0 0%	28 3%	2 1%	10 2%
1988	0 0%	0 0%	0 0%	0 8%	2 6%	5 8%	0 0%	3 7%	15 0%	2 1%	4 5%	0 0%	8 1%	0 0%	0 0%	7 9%	19 7%	0 0%	8 1%	0 0%	21 8%
1989	0 0%	0 0%	0 0%	0 4%	0 0%	5 4%	6 0%	0 0%	3 0%	0 0%	3 8%	0 0%	14 6%	2 2%	0 3%	11 7%	18 4%	0 0%	26 6%	0 4%	7 2%
1990	0 0%	0 0%	0 0%	0 0%	0 0%	23 5%	5 9%	0 0%	3 2%	0 2%	0 1%	0 0%	10 5%	0 0%	0 1%	1 9%	13 0%	0 0%	33 8%	0 0%	7 6%
1991	0 0%	0 0%	0 0%	2 2%	0 0%	9 1%	1 8%	0 0%	3 6%	0 0%	2 2%	0 0%	17 2%	0 0%	0 7%	6 2%	25 9%	0 0%	15 0%	0 0%	16 1%
1992	0 0%	0 0%	0 0%	0 0%	1 0%	7 2%	3 7%	0 0%	2 9%	0 0%	2 1%	0 0%	7 0%	0 0%	0 0%	11 8%	28 5%	0 0%	6 6%	0 0%	29 3%
1993	0 0%	0 0%	0 0%	0 0%	0 0%	14 7%	1 7%	0 4%	4 1%	0 0%	2 9%	0 0%	3 2%	0 0%	0 7%	3 8%	20 9%	0 0%	17 9%	0 0%	29 7%
1994	0 0%	0 0%	0 0%	0 0%	0 0%	4 2%	0 4%	0 0%	2 3%	0 0%	2 6%	0 0%	0 6%	0 0%	0 0%	5 2%	38 1%	0 0%	13 0%	0 4%	33 1%
1995	0 0%	0 0%	0 0%	0 0%	0 4%	8 0%	3 0%	0 0%	2 0%	0 0%	0 7%	0 0%	2 4%	0 0%	0 0%	1 5%	27 7%	0 0%	28 8%	0 0%	25 8%
1996	0 2%	0 0%	0 0%	0 0%	0 0%	0 7%	1 2%	0 0%	3 6%	0 0%	1 2%	0 0%	1 6%	0 0%	0 0%	1 5%	26 3%	0 0%	37 4%	0 0%	26 4%
1997	0 0%	0 6%	0 0%	0 0%	0 8%	2 8%	4 3%	0 0%	0 7%	0 0%	0 6%	0 0%	0 8%	0 0%	1 0%	0 8%	29 6%	0 0%	16 6%	1 4%	40 2%
1998	0 2%	0 0%	0 0%	0 0%	0 4%	0 4%	0 7%	0 0%	1 5%	0 0%	0 0%	0 0%	0 5%	0 0%	0 0%	0 5%	25 6%	0 0%	31 1%	0 7%	38 4%
1999	0 0%	0 0%	0 0%	0 0%	0 0%	0 4%	2 7%	0 0%	3 3%	0 0%	0 0%	0 0%	3 1%	0 0%	0 3%	1 3%	23 4%	0 0%	40 8%	0 0%	24 8%
2000	0 0%	0 0%	0 0%	0 0%	0 0%	12 5%	2 7%	0 0%	2 9%	0 0%	0 0%	0 0%	1 7%	0 0%	1 4%	2 2%	29 2%	0 0%	36 0%	0 0%	11 4%
2001	0 3%	0 0%	0 0%	0 0%	0 0%	2 9%	2 8%	0 0%	1 5%	0 0%	0 0%	0 0%	4 5%	0 0%	0 4%	0 4%	25 9%	0 0%	26 1%	0 0%	35 2%
2002	0 0%	0 0%	0 0%	0 0%	0 0%	6 8%	3 6%	0 0%	0 9%	0 0%	0 0%	0 0%	3 7%	0 0%	0 6%	0 6%	12 2%	0 0%	39 2%	3 4%	28 9%
2003	0 1%	0 0%	0 0%	0 0%	0 6%	5 3%	1 9%	0 0%	1 3%	0 0%	0 0%	0 0%	4 6%	0 0%	0 0%	0 4%	15 0%	0 0%	41 6%	1 9%	27 3%
2004	0 0%	0 2%	0 0%	0 0%	0 0%	5 9%	1 2%	0 0%	1 3%	0 0%	0 0%	0 0%	7 3%	0 0%	0 7%	0 7%	13 0%	0 0%	29 6%	0 0%	40 1%
2005	0 0%	0 0%	0 0%	0 0%	0 0%	5 6%	2 1%	0 0%	3 9%	0 0%	0 3%	0 0%	4 2%	0 0%	2 0%	0 7%	13 0%	0 0%	9 8%	0 0%	58 4%
2006	0 1%	0 0%	0 0%	0 0%	0 0%	6 3%	1 8%	0 0%	2 0%	0 0%	0 0%	0 0%	5 7%	0 0%	0 3%	0 8%	9 5%	0 0%	37 7%	0 0%	35 7%
2007	0 0%	0 0%	0 0%	0 1%	0 0%	9 7%	1 4%	0 0%	0 9%	0 0%	0 0%	0 0%	4 8%	0 0%	0 3%	0 8%	14 3%	0 0%	34 5%	0 0%	33 1%
1983-2007	0 0%	0 0%	0 0%	0 2%	0 2%	9 7%	2 1%	0 3%	3 7%	0 2%	1 4%	0 0%	5 0%	0 1%	0 4%	4 7%	22 9%	0 0%	24 4%	0 4%	24 3%
1979-1984	0 0%	0 0%	0 0%	0 9%	0 0%	22 5%	0 0%	0 9%	4 3%	0 0%	3 7%	0 0%	2 4%	0 0%	0 0%	11 8%	40 7%	0 0%	9 9%	0 0%	3 0%
1985-1995	0 0%	0 0%	0 0%	0 3%	0 4%	12 5%	2 4%	0 5%	5 4%	0 5%	2 4%	0 0%	7 0%	0 2%	0 2%	7 6%	23 1%	0 0%	19 0%	0 3%	18 3%
1996-1998	0 1%	0 2%	0 0%	0 0%	0 4%	1 3%	2 1%	0 0%	2 0%	0 0%	0 6%	0 0%	1 0%	0 0%	0 3%	0 9%	27 1%	0 0%	28 4%	0 7%	35 0%
1999-2007	0 0%	0 0%	0 0%	0 0%	0 1%	6 1%	2 3%	0 0%	2 0%	0 0%	0 0%	0 0%	4 4%	0 0%	0 7%	0 9%	17 3%	0 0%	32 8%	0 6%	32 8%



**Appendix C.41. Percent distribution of George Adams Fall Fingerling reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1982	0.0%	0.0%	0.0%	0.0%	0.0%	20.9%	0.0%	0.3%	4.1%	0.5%	0.6%	0.0%	3.0%	0.0%	0.4%	30.4%	10.3%	0.0%	7.7%	0.0%	21.9%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	15.8%	0.5%	0.0%	3.5%	1.6%	5.7%	0.0%	0.2%	0.0%	0.9%	21.0%	24.9%	0.0%	8.7%	0.0%	17.2%
1984	0.0%	0.1%	0.0%	0.5%	0.4%	18.0%	0.0%	1.2%	4.5%	3.2%	1.9%	0.0%	2.2%	0.0%	0.4%	12.7%	20.2%	0.0%	18.6%	0.0%	16.0%
1989	0.0%	0.2%	0.0%	0.0%	0.0%	8.5%	1.7%	0.0%	3.8%	0.0%	4.8%	0.0%	12.9%	0.2%	0.9%	18.1%	14.8%	0.0%	20.3%	1.4%	12.2%
1990	0.1%	0.0%	0.0%	0.4%	0.0%	19.3%	5.0%	0.0%	4.7%	0.3%	1.6%	0.0%	15.0%	0.0%	0.4%	11.3%	17.7%	0.0%	17.0%	0.3%	6.8%
1991	0.2%	0.0%	0.0%	0.0%	0.0%	18.4%	4.5%	0.0%	2.2%	0.0%	0.4%	0.0%	8.6%	0.0%	0.0%	18.8%	17.2%	0.0%	14.5%	0.8%	14.4%
1992	0.0%	0.0%	0.0%	0.0%	0.0%	15.6%	0.0%	0.0%	2.1%	0.0%	5.7%	0.0%	20.3%	0.0%	0.0%	2.6%	39.6%	0.0%	6.8%	0.0%	7.3%
1993	0.0%	0.0%	0.0%	0.0%	0.0%	34.2%	7.9%	0.9%	3.5%	0.0%	0.0%	0.0%	8.8%	0.0%	0.0%	4.4%	21.9%	0.0%	0.0%	0.0%	18.4%
1994	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.0%	7.0%	0.0%	0.0%	0.0%	72.1%
1995	0.0%	0.0%	0.0%	0.0%	0.0%	7.8%	3.9%	0.0%	3.9%	0.0%	2.4%	0.0%	1.0%	0.0%	0.0%	4.4%	18.5%	0.0%	0.0%	0.0%	58.0%
1996	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	0.0%	12.6%	0.0%	2.4%	0.0%	5.9%	0.0%	0.6%	0.0%	13.2%	0.0%	0.0%	0.0%	60.6%
1997	2.1%	0.0%	0.0%	0.0%	0.0%	4.4%	1.5%	0.0%	3.2%	0.0%	0.3%	0.0%	3.2%	0.0%	0.0%	0.9%	20.1%	0.0%	0.0%	0.0%	64.3%
1998	0.7%	0.2%	0.0%	0.0%	0.0%	0.2%	1.1%	0.0%	0.7%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	1.8%	7.4%	0.0%	0.0%	0.0%	86.2%
1999	0.4%	0.0%	0.0%	0.0%	0.0%	0.8%	9.0%	0.0%	2.5%	0.0%	0.0%	0.0%	4.9%	0.0%	1.3%	2.3%	9.5%	0.0%	0.6%	0.0%	68.6%
2000	0.4%	0.0%	0.0%	0.2%	0.0%	19.7%	8.0%	0.0%	2.7%	0.0%	0.1%	0.0%	3.6%	0.0%	0.0%	0.4%	6.1%	0.0%	0.0%	12.0%	46.8%
2001	0.8%	0.0%	0.0%	0.0%	0.5%	12.5%	2.0%	0.0%	2.2%	0.0%	0.0%	0.0%	6.4%	0.0%	1.0%	5.6%	8.4%	0.0%	5.4%	0.5%	54.7%
2002	1.5%	0.0%	0.0%	1.0%	0.0%	11.2%	10.2%	0.0%	1.8%	0.0%	0.0%	0.0%	4.1%	0.0%	1.0%	7.2%	4.7%	0.0%	3.9%	9.4%	44.1%
2003	0.5%	0.1%	0.0%	0.0%	0.0%	11.7%	2.0%	0.0%	2.7%	0.0%	0.0%	0.0%	6.4%	0.0%	0.2%	4.2%	6.1%	0.0%	6.3%	11.9%	47.6%
2004	0.5%	0.2%	0.0%	0.0%	0.0%	14.7%	3.0%	0.2%	2.3%	0.0%	0.3%	0.0%	6.1%	0.0%	0.5%	7.2%	5.4%	0.0%	4.6%	1.1%	53.6%
2005	0.3%	0.0%	0.0%	0.1%	0.8%	11.9%	8.5%	0.0%	5.7%	0.0%	0.0%	0.0%	6.8%	0.0%	1.3%	2.6%	6.4%	0.0%	2.9%	6.2%	46.5%
2006	0.4%	0.2%	0.0%	0.7%	0.0%	12.2%	1.8%	0.0%	4.4%	0.0%	0.0%	0.0%	5.1%	0.0%	0.4%	7.6%	8.4%	0.0%	6.2%	1.3%	51.2%
2007	0.2%	0.3%	0.0%	0.0%	0.0%	10.0%	1.6%	0.0%	2.5%	0.0%	0.0%	0.0%	3.5%	0.0%	0.2%	2.5%	11.1%	0.0%	10.4%	11.1%	46.7%
1983-2007	0.4%	0.1%	0.0%	0.1%	0.1%	12.2%	3.5%	0.4%	3.4%	0.3%	1.2%	0.0%	5.9%	0.0%	0.4%	8.2%	13.6%	0.0%	6.1%	2.5%	41.6%
1979-1984	0.0%	0.0%	0.0%	0.2%	0.1%	18.2%	0.2%	0.5%	4.0%	1.7%	2.8%	0.0%	1.8%	0.0%	0.6%	21.4%	18.5%	0.0%	11.7%	0.0%	18.3%
1985-1995	0.1%	0.0%	0.0%	0.1%	0.0%	14.8%	3.3%	1.1%	2.9%	0.0%	2.1%	0.0%	9.5%	0.0%	0.2%	10.5%	19.5%	0.0%	8.4%	0.4%	27.0%
1996-1998	0.9%	0.1%	0.0%	0.0%	0.0%	1.5%	2.4%	0.0%	5.5%	0.0%	0.9%	0.0%	3.6%	0.0%	0.2%	0.9%	13.6%	0.0%	0.0%	0.0%	70.4%
1999-2007	0.5%	0.1%	0.0%	0.2%	0.1%	11.6%	5.1%	0.0%	3.0%	0.0%	0.0%	0.0%	5.2%	0.0%	0.7%	4.4%	7.3%	0.0%	4.5%	5.9%	51.1%



**Appendix C.42. Percent distribution of George Adams Fall Fingerling total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo SI		Canada			WVOR coast			Puget Sound		Terminal			
	Trawl	Net	Sport	Trawl	Sport	Trawl	Sport	Trawl	Sport	Trawl	Net	Sport	Trawl	Net	Sport	Net	Sport	Trawl	Net	Sport	
1982	0.0%	0.0%	0.0%	0.0%	0.0%	21.7%	0.0%	0.2%	4.1%	0.0%	0.0%	0.0%	2.9%	0.0%	0.5%	29.2%	12.3%	0.0%	7.5%	0.0%	20.3%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	12.7%	0.3%	0.0%	2.4%	1.2%	4.2%	0.0%	0.1%	0.0%	0.0%	19.7%	41.7%	0.0%	6.0%	0.0%	11.0%
1984	0.0%	0.1%	0.0%	0.0%	0.5%	18.1%	0.0%	1.2%	4.4%	3.2%	1.0%	0.0%	2.3%	0.0%	0.4%	12.9%	22.1%	0.0%	17.0%	0.0%	14.0%
1989	0.0%	0.7%	0.0%	0.1%	0.0%	10.2%	1.0%	0.0%	3.9%	0.1%	4.4%	0.0%	13.1%	0.2%	0.0%	17.9%	17.7%	0.0%	17.9%	1.4%	10.3%
1990	0.0%	0.0%	0.0%	0.5%	0.0%	21.2%	4.6%	0.0%	4.9%	0.4%	1.9%	0.0%	15.9%	0.0%	0.4%	10.9%	18.1%	0.0%	15.4%	0.3%	5.9%
1991	0.2%	0.0%	0.0%	0.0%	0.0%	19.4%	4.9%	0.0%	2.3%	0.0%	0.4%	0.0%	8.7%	0.0%	0.0%	17.9%	18.0%	0.0%	13.7%	0.0%	13.3%
1992	0.0%	0.0%	0.0%	0.0%	0.0%	16.0%	0.0%	0.0%	1.0%	0.0%	5.1%	0.0%	20.3%	0.0%	0.0%	2.3%	41.9%	0.0%	6.0%	0.0%	6.9%
1993	0.0%	0.0%	0.0%	0.0%	0.0%	34.1%	7.4%	1.9%	3.7%	0.0%	0.0%	0.0%	8.1%	0.0%	0.0%	4.4%	25.2%	0.0%	0.0%	0.0%	15.0%
1994	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	10.4%	0.0%	0.0%	0.0%	64.0%
1995	0.0%	0.0%	0.0%	0.0%	0.0%	9.0%	3.0%	0.0%	4.2%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	4.2%	28.1%	0.0%	0.0%	0.0%	45.0%
1996	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	4.6%	0.0%	14.3%	0.0%	2.7%	0.0%	5.7%	0.0%	0.5%	0.0%	15.4%	0.0%	0.0%	0.0%	55.9%
1997	2.1%	0.0%	0.0%	0.0%	0.0%	4.0%	1.3%	0.0%	3.2%	0.0%	0.5%	0.0%	3.2%	0.0%	0.0%	0.0%	25.7%	0.0%	0.0%	0.0%	58.3%
1998	0.7%	0.7%	0.0%	0.0%	0.0%	0.2%	1.2%	0.0%	0.9%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	2.0%	26.0%	0.0%	0.0%	0.0%	65.0%
1999	0.4%	0.0%	0.0%	0.0%	0.0%	0.9%	9.2%	0.0%	3.1%	0.0%	0.0%	0.0%	5.0%	0.0%	1.5%	2.2%	12.7%	0.0%	0.0%	0.0%	63.0%
2000	0.4%	0.0%	0.0%	0.2%	0.0%	19.2%	8.3%	0.0%	2.9%	0.0%	0.2%	0.0%	3.7%	0.0%	0.0%	0.3%	12.0%	0.0%	0.0%	12.0%	40.7%
2001	0.9%	0.0%	0.0%	0.0%	0.7%	11.0%	2.1%	0.0%	2.9%	0.0%	0.0%	0.0%	6.0%	0.0%	1.0%	5.5%	15.3%	0.0%	5.0%	0.0%	47.0%
2002	1.7%	0.0%	0.0%	1.1%	0.0%	11.0%	11.1%	0.0%	1.0%	0.0%	0.0%	0.0%	4.4%	0.0%	1.0%	7.0%	7.0%	0.0%	3.0%	9.0%	40.3%
2003	0.0%	0.5%	0.0%	0.0%	0.0%	11.9%	2.3%	0.0%	3.1%	0.0%	0.0%	0.0%	6.9%	0.0%	0.2%	4.1%	9.0%	0.0%	6.0%	12.4%	43.5%
2004	0.0%	0.0%	0.0%	0.0%	0.0%	14.9%	3.3%	0.1%	2.9%	0.0%	0.0%	0.0%	6.7%	0.0%	0.0%	7.0%	8.9%	0.0%	4.5%	1.2%	48.0%
2005	0.3%	0.0%	0.0%	0.1%	0.0%	11.4%	8.9%	0.0%	6.9%	0.0%	0.0%	0.0%	7.4%	0.0%	1.3%	2.0%	9.0%	0.0%	2.7%	6.0%	41.4%
2006	0.4%	0.2%	0.0%	0.0%	0.0%	12.0%	2.0%	0.0%	5.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.4%	7.7%	12.2%	0.0%	6.0%	1.4%	46.2%
2007	0.2%	0.4%	0.0%	0.0%	0.0%	9.0%	1.0%	0.0%	2.4%	0.0%	0.0%	0.0%	3.4%	0.0%	0.1%	2.9%	23.0%	0.0%	6.7%	10.0%	36.0%
1983-2007	0.4%	0.2%	0.0%	0.2%	0.1%	12.3%	3.6%	0.5%	3.0%	0.2%	1.2%	0.0%	6.0%	0.0%	0.4%	6.1%	18.0%	0.0%	5.5%	2.0%	36.2%
1979-1984	0.0%	0.0%	0.0%	0.2%	0.2%	17.9%	0.1%	0.5%	3.0%	1.7%	2.3%	0.0%	1.0%	0.0%	0.5%	20.0%	25.4%	0.0%	10.4%	0.0%	15.3%
1985-1995	0.1%	0.1%	0.0%	0.1%	0.0%	15.9%	3.2%	1.4%	3.0%	0.1%	2.1%	0.0%	9.5%	0.0%	0.2%	10.9%	22.0%	0.0%	7.0%	0.4%	23.1%
1996-1998	0.0%	0.2%	0.0%	0.0%	0.0%	2.1%	2.4%	0.0%	6.1%	0.0%	1.1%	0.0%	3.5%	0.0%	0.2%	0.0%	22.0%	0.0%	0.0%	0.0%	50.0%
1999-2007	0.0%	0.2%	0.0%	0.3%	0.2%	11.3%	5.4%	0.0%	3.3%	0.0%	0.1%	0.0%	5.0%	0.0%	0.7%	4.4%	12.2%	0.0%	4.1%	6.1%	45.4%

**Appendix C.43. Percent distribution of So. Puget Sound Fall Fingerling reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo SI		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1982	0.2%	0.0%	0.0%	0.1%	0.1%	22.4%	0.1%	2.4%	11.5%	0.8%	2.0%	0.0%	2.8%	0.0%	0.1%	17.9%	21.4%	0.0%	7.1%	0.0%	10.9%
1983	0.1%	0.0%	0.0%	0.7%	0.1%	18.2%	0.3%	0.3%	4.1%	1.8%	3.2%	0.0%	1.6%	0.0%	0.1%	20.5%	28.0%	0.0%	6.7%	0.2%	14.2%
1984	0.1%	0.2%	0.0%	0.7%	0.1%	20.9%	0.3%	1.3%	7.3%	1.4%	1.2%	0.0%	1.4%	0.0%	0.1%	15.2%	22.1%	0.0%	9.3%	0.2%	18.4%
1985	0.8%	0.0%	0.0%	0.0%	0.2%	18.6%	0.8%	0.4%	5.9%	0.3%	2.0%	0.0%	1.9%	0.0%	0.0%	17.6%	18.2%	0.0%	11.7%	0.0%	21.6%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	19.0%	0.0%	0.0%	7.5%	0.0%	2.9%	0.0%	4.0%	0.0%	1.3%	9.8%	21.0%	0.0%	0.6%	0.0%	33.8%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	12.7%	0.0%	0.0%	12.7%	0.0%	3.9%	0.0%	7.2%	0.5%	0.2%	13.4%	10.6%	0.0%	0.0%	0.0%	38.8%
1988	0.1%	0.0%	0.0%	0.2%	0.5%	5.5%	4.2%	0.2%	7.3%	0.5%	4.6%	0.0%	7.1%	0.0%	0.6%	25.2%	14.1%	0.0%	1.2%	0.0%	28.7%
1989	0.1%	0.0%	0.0%	0.2%	0.0%	7.4%	2.5%	0.2%	4.3%	0.3%	4.0%	0.0%	11.0%	0.0%	0.4%	15.3%	15.7%	0.0%	6.1%	0.0%	32.3%
1990	0.0%	0.0%	0.1%	0.3%	0.0%	22.7%	4.3%	0.3%	3.4%	0.3%	1.2%	0.0%	9.0%	0.0%	0.4%	14.0%	11.6%	0.0%	9.7%	0.4%	22.4%
1991	0.4%	0.0%	0.0%	0.0%	0.0%	15.2%	2.6%	0.1%	1.7%	0.1%	1.0%	0.0%	11.6%	0.0%	0.3%	11.8%	12.6%	0.0%	14.7%	0.2%	27.5%
1992	0.6%	0.1%	0.0%	0.0%	0.0%	17.2%	2.2%	0.3%	3.4%	0.9%	3.1%	0.0%	9.1%	0.0%	0.7%	14.1%	17.4%	0.0%	9.6%	0.0%	21.5%
1993	0.2%	0.1%	0.0%	0.0%	0.0%	15.6%	4.6%	0.7%	3.1%	0.1%	2.9%	0.0%	5.5%	0.0%	0.2%	8.3%	20.8%	0.0%	7.5%	0.0%	30.4%
1994	0.0%	0.0%	0.0%	0.5%	0.0%	9.1%	1.3%	0.0%	3.0%	0.0%	4.3%	0.0%	0.7%	0.0%	0.0%	11.3%	9.5%	0.0%	5.0%	0.3%	55.1%
1995	0.2%	0.0%	0.0%	0.1%	0.0%	3.7%	1.1%	0.0%	1.8%	0.0%	1.0%	0.0%	1.3%	0.0%	0.0%	4.6%	11.7%	0.0%	1.0%	0.0%	73.4%
1996	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	1.8%	0.0%	4.1%	0.0%	0.4%	0.0%	2.9%	0.0%	0.0%	3.7%	14.8%	0.0%	2.6%	0.0%	69.4%
1997	0.5%	0.0%	0.0%	0.3%	0.0%	5.2%	1.5%	0.0%	1.8%	0.0%	0.6%	0.0%	1.6%	0.0%	0.1%	2.2%	12.9%	0.0%	0.7%	0.2%	72.5%
1998	1.3%	0.0%	0.0%	0.9%	0.2%	0.5%	0.8%	0.0%	1.7%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	4.2%	5.8%	0.0%	3.6%	0.5%	79.3%
1999	0.5%	0.0%	0.0%	0.1%	0.0%	0.7%	4.0%	0.0%	2.4%	0.0%	0.0%	0.0%	3.0%	0.0%	0.3%	4.5%	4.8%	0.0%	4.7%	0.0%	74.8%
2000	0.4%	0.0%	0.0%	0.0%	0.0%	9.1%	3.8%	0.0%	1.8%	0.0%	0.0%	0.0%	0.3%	0.0%	0.3%	6.3%	6.4%	0.0%	5.9%	0.0%	65.7%
2001	0.1%	0.1%	0.0%	0.0%	0.2%	8.1%	3.2%	0.0%	2.9%	0.0%	0.0%	0.0%	4.2%	0.0%	0.4%	4.2%	8.7%	0.0%	7.2%	0.0%	60.8%
2002	0.7%	0.0%	0.0%	0.7%	0.3%	12.7%	3.1%	0.0%	4.3%	0.0%	0.1%	0.0%	4.0%	0.0%	0.5%	3.6%	6.3%	0.0%	14.4%	0.0%	49.4%
2003	0.6%	0.0%	0.0%	0.8%	0.0%	14.2%	3.7%	0.0%	3.8%	0.0%	0.0%	0.0%	4.9%	0.0%	0.4%	7.0%	9.5%	0.0%	7.5%	0.0%	47.6%
2004	0.4%	0.1%	0.0%	0.6%	0.2%	17.8%	4.2%	0.0%	2.8%	0.0%	0.0%	0.0%	9.7%	0.0%	1.4%	8.1%	9.1%	0.0%	6.4%	0.0%	39.4%
2005	0.0%	0.0%	0.0%	0.4%	0.3%	13.5%	4.5%	0.0%	3.8%	0.0%	0.0%	0.0%	5.6%	0.0%	1.2%	4.1%	6.1%	0.0%	1.8%	0.0%	58.7%
2006	0.3%	0.0%	0.1%	0.5%	0.4%	12.2%	2.6%	0.0%	2.0%	0.0%	0.0%	0.0%	6.1%	0.0%	0.5%	6.3%	6.5%	0.0%	7.8%	0.0%	54.7%
2007	0.2%	0.0%	0.0%	0.3%	0.0%	11.7%	4.0%	0.0%	1.4%	0.0%	0.0%	0.0%	5.0%	0.0%	0.2%	3.2%	10.0%	0.0%	12.5%	0.2%	51.3%
1983-2007	0.3%	0.0%	0.0%	0.3%	0.1%	12.1%	2.4%	0.2%	4.2%	0.3%	1.5%	0.0%	4.7%	0.0%	0.4%	9.9%	12.9%	0.0%	6.4%	0.1%	44.3%
1979-1984	0.2%	0.1%	0.0%	0.5%	0.1%	20.5%	0.2%	1.3%	7.6%	1.3%	2.1%	0.0%	2.0%	0.0%	0.1%	17.9%	23.8%	0.0%	7.7%	0.1%	14.5%
1985-1995	0.2%	0.0%	0.0%	0.1%	0.1%	13.3%	2.1%	0.2%	4.9%	0.2%	2.8%	0.0%	6.2%	0.0%	0.4%	13.2%	14.8%	0.0%	6.1%	0.1%	35.0%
1996-1998	0.6%	0.0%	0.0%	0.4%	0.1%	1.9%	1.4%	0.0%	2.5%	0.0%	0.3%	0.0%	1.8%	0.0%	0.0%	3.4%	11.2%	0.0%	2.4%	0.2%	73.7%
1999-2007	0.4%	0.0%	0.0%	0.4%	0.2%	11.1%	3.7%	0.0%	2.8%	0.0%	0.0%	0.0%	4.8%	0.0%	0.6%	5.2%	7.5%	0.0%	7.6%	0.0%	55.8%

Appendix C.44. Percent distribution of So. Puget Sound Fall Fingerling total fishing mortalities among fisheries and escapement.

Catch Year	AASM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo St		Canada			WVOR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1982	0.2%	0.0%	0.0%	0.2%	0.1%	24.1%	0.1%	2.1%	10.5%	1.0%	1.8%	0.0%	2.8%	0.0%	0.1%	16.9%	24.1%	0.0%	6.4%	0.0%	9.3%
1983	0.1%	0.0%	0.0%	0.7%	0.1%	17.7%	0.2%	0.2%	3.5%	1.8%	2.8%	0.0%	1.8%	0.0%	0.0%	19.5%	34.9%	0.0%	5.6%	0.2%	11.1%
1984	0.1%	0.2%	0.0%	0.7%	0.1%	21.1%	0.3%	1.3%	7.1%	1.4%	1.1%	0.0%	1.9%	0.0%	0.1%	14.7%	24.3%	0.0%	9.0%	0.2%	16.8%
1985	0.8%	0.0%	0.0%	0.0%	0.2%	18.9%	0.9%	0.3%	5.8%	0.3%	1.9%	0.0%	1.8%	0.0%	0.0%	17.4%	20.7%	0.0%	11.1%	0.0%	20.2%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	18.9%	0.0%	0.0%	7.1%	0.0%	2.8%	0.0%	4.0%	0.0%	1.3%	9.1%	26.5%	0.0%	0.7%	0.0%	29.5%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	21.3%	0.0%	0.0%	10.5%	0.0%	3.4%	0.0%	8.9%	0.9%	0.2%	11.0%	15.1%	0.0%	0.0%	0.0%	28.8%
1988	0.4%	0.0%	0.0%	0.2%	0.4%	10.2%	3.3%	0.2%	8.1%	1.0%	3.5%	0.0%	7.6%	0.0%	0.5%	21.2%	22.1%	0.0%	0.9%	0.0%	19.3%
1989	0.1%	0.0%	0.0%	0.3%	0.0%	8.8%	2.4%	0.2%	5.0%	0.4%	3.7%	0.0%	12.2%	0.0%	0.4%	14.7%	17.0%	0.0%	5.8%	0.0%	28.9%
1990	0.0%	0.1%	0.1%	0.3%	0.0%	23.9%	4.3%	0.3%	3.5%	0.3%	1.2%	0.0%	9.2%	0.0%	0.4%	13.3%	13.0%	0.0%	9.1%	0.4%	20.6%
1991	0.5%	0.0%	0.0%	0.0%	0.0%	16.5%	2.6%	0.2%	1.8%	0.1%	0.9%	0.0%	12.3%	0.0%	0.4%	11.3%	13.9%	0.0%	13.9%	0.2%	25.3%
1992	0.6%	0.2%	0.0%	0.0%	0.0%	17.4%	2.1%	0.3%	3.5%	0.8%	2.9%	0.0%	9.1%	0.0%	0.6%	12.8%	23.3%	0.0%	8.3%	0.0%	17.9%
1993	0.3%	0.1%	0.0%	0.0%	0.0%	18.1%	4.4%	1.0%	3.5%	0.1%	2.8%	0.0%	5.9%	0.0%	0.2%	7.8%	22.6%	0.0%	6.9%	0.0%	26.5%
1994	0.0%	0.0%	0.0%	0.5%	0.0%	9.6%	1.3%	0.0%	3.3%	0.0%	5.1%	0.0%	0.8%	0.0%	0.0%	11.1%	16.6%	0.0%	4.5%	0.3%	47.1%
1995	0.2%	0.0%	0.0%	0.1%	0.0%	5.4%	1.2%	0.0%	2.1%	0.0%	1.7%	0.0%	1.3%	0.0%	0.0%	4.8%	17.3%	0.0%	1.0%	0.0%	64.9%
1996	0.2%	0.0%	0.0%	0.0%	0.1%	0.9%	1.8%	0.0%	4.8%	0.0%	0.6%	0.0%	2.8%	0.0%	0.0%	3.7%	18.0%	0.0%	2.5%	0.0%	64.6%
1997	0.5%	0.0%	0.0%	0.3%	0.0%	6.2%	1.5%	0.0%	1.9%	0.0%	0.9%	0.0%	1.7%	0.0%	0.1%	2.1%	16.1%	0.0%	0.7%	0.1%	67.7%
1998	1.4%	0.0%	0.0%	0.9%	0.3%	0.5%	0.8%	0.0%	1.8%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	4.3%	11.5%	0.0%	3.7%	0.5%	73.2%
1999	0.6%	0.0%	0.0%	0.2%	0.0%	0.7%	4.3%	0.0%	3.0%	0.0%	0.0%	0.0%	3.5%	0.0%	0.3%	4.5%	7.4%	0.0%	4.8%	0.0%	70.7%
2000	0.4%	0.1%	0.0%	0.0%	0.0%	9.0%	4.1%	0.0%	2.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.2%	6.5%	14.0%	0.0%	5.5%	0.0%	57.9%
2001	0.1%	0.1%	0.0%	0.0%	0.3%	7.8%	3.4%	0.0%	3.4%	0.0%	0.0%	0.0%	4.7%	0.0%	0.4%	4.1%	13.8%	0.0%	7.0%	0.0%	54.9%
2002	0.9%	0.0%	0.0%	0.8%	0.4%	12.5%	3.4%	0.0%	4.9%	0.0%	0.2%	0.0%	4.3%	0.0%	0.5%	3.5%	9.0%	0.0%	13.8%	0.0%	45.9%
2003	0.7%	0.0%	0.0%	0.9%	0.0%	13.8%	4.3%	0.0%	4.2%	0.0%	0.0%	0.0%	5.3%	0.0%	0.4%	6.6%	12.8%	0.0%	7.1%	0.0%	43.9%
2004	0.4%	0.2%	0.0%	0.6%	0.2%	17.1%	4.5%	0.0%	3.0%	0.0%	0.0%	0.0%	10.2%	0.0%	1.4%	7.7%	14.3%	0.0%	5.8%	0.0%	34.6%
2005	0.0%	0.0%	0.0%	0.4%	0.4%	13.3%	4.9%	0.0%	4.4%	0.0%	0.0%	0.0%	6.2%	0.0%	1.2%	4.1%	9.9%	0.0%	1.7%	0.0%	53.5%
2006	0.3%	0.0%	0.1%	0.5%	0.5%	12.1%	2.8%	0.0%	2.3%	0.0%	0.0%	0.0%	6.7%	0.0%	0.5%	6.3%	11.2%	0.0%	7.3%	0.0%	49.4%
2007	0.2%	0.0%	0.0%	0.3%	0.0%	11.5%	4.2%	0.0%	1.6%	0.0%	0.0%	0.0%	5.9%	0.0%	0.2%	3.2%	15.6%	0.0%	11.8%	0.2%	45.7%
1983-2007	0.4%	0.0%	0.0%	0.3%	0.1%	13.0%	2.4%	0.2%	4.4%	0.3%	1.4%	0.0%	5.0%	0.0%	0.4%	9.3%	17.1%	0.0%	6.0%	0.1%	39.6%
1979-1984	0.2%	0.1%	0.0%	0.5%	0.1%	21.0%	0.2%	1.2%	7.0%	1.4%	1.9%	0.0%	2.0%	0.0%	0.1%	17.1%	27.8%	0.0%	7.0%	0.1%	12.4%
1985-1995	0.3%	0.0%	0.0%	0.1%	0.1%	15.3%	2.0%	0.2%	5.0%	0.3%	2.7%	0.0%	6.8%	0.1%	0.4%	12.2%	18.9%	0.0%	5.6%	0.1%	29.9%
1996-1998	0.7%	0.0%	0.0%	0.4%	0.2%	2.5%	1.4%	0.0%	2.9%	0.0%	0.5%	0.0%	1.9%	0.0%	0.0%	3.4%	15.2%	0.0%	2.3%	0.2%	68.5%
1999-2007	0.4%	0.1%	0.0%	0.4%	0.2%	10.9%	4.0%	0.0%	3.2%	0.0%	0.0%	0.0%	5.2%	0.0%	0.6%	5.2%	12.0%	0.0%	7.2%	0.0%	50.7%

**Appendix C.45. Percent distribution of White River Spring Yearling reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo Sit		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	67.1%	23.2%	0.0%	6.1%	0.0%	1.2%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	1.6%	0.0%	0.0%	11.3%	59.7%	0.0%	0.0%	0.0%	21.5%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	0.0%	5.2%	0.0%	5.8%	0.0%	0.0%	2.6%	0.0%	0.0%	3.9%	25.2%	0.0%	5.2%	0.0%	47.7%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%	0.0%	30.8%	50.6%	0.0%	0.0%	0.0%	13.5%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	2.4%	0.4%	2.0%	0.0%	0.4%	0.0%	0.0%	15.3%	52.3%	0.0%	0.0%	0.0%	26.8%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.4%	0.0%	3.3%	0.0%	0.0%	11.3%	42.3%	0.0%	0.0%	0.0%	41.2%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.8%	0.0%	2.5%	0.0%	0.2%	0.0%	1.3%	0.0%	0.2%	13.0%	48.3%	0.0%	0.0%	0.0%	33.6%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	1.2%	0.0%	1.0%	0.0%	6.0%	0.0%	0.2%	13.3%	40.9%	0.0%	0.3%	0.0%	35.8%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.5%	0.0%	0.7%	0.0%	5.4%	0.0%	0.0%	15.6%	42.0%	0.0%	0.5%	0.0%	33.3%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	1.3%	0.0%	1.3%	0.0%	0.0%	0.0%	4.1%	0.0%	0.0%	10.8%	38.1%	0.0%	0.0%	0.0%	43.6%
1992	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.8%	0.0%	1.9%	0.0%	2.8%	0.0%	2.4%	0.0%	0.5%	7.1%	45.0%	0.0%	0.8%	0.0%	38.2%
1993	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	2.9%	30.6%	0.0%	0.7%	0.0%	62.2%
1994	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	1.7%	52.2%	0.0%	0.0%	0.0%	42.7%
1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	18.8%	0.0%	0.0%	0.0%	80.9%
1996	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	51.1%	0.0%	0.0%	0.0%	46.0%
1997	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	39.6%	0.0%	0.0%	0.0%	57.8%
1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	1.6%	27.0%	0.0%	0.0%	0.0%	69.6%
1999	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.5%	0.0%	0.0%	0.0%	64.6%
2000	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	37.6%	0.0%	0.0%	0.0%	55.3%
2006	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	0.1%	0.2%	8.3%	0.0%	1.7%	0.0%	85.7%
2007	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.4%	0.2%	15.8%	0.0%	2.2%	0.0%	80.0%
1983-2007	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.2%	0.2%	1.0%	0.3%	0.6%	0.0%	1.6%	0.0%	0.1%	10.1%	37.1%	0.0%	0.8%	0.0%	46.6%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	1.7%	0.8%	1.9%	0.5%	0.0%	1.4%	0.0%	0.0%	27.4%	36.0%	0.0%	3.8%	0.0%	23.5%
1985-1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.5%	0.0%	1.3%	0.0%	1.0%	0.0%	2.4%	0.0%	0.1%	11.1%	41.9%	0.0%	0.2%	0.0%	40.9%
1996-1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	1.7%	39.2%	0.0%	0.0%	0.0%	57.9%
1999-2007	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.7%	0.0%	0.1%	0.7%	23.0%	0.0%	1.0%	0.0%	71.4%

**Appendix C.46. Percent distribution of White River Spring Yearling total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1982	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	1.9%	0.9%	0.0%	0.0%	0.9%	0.0%	0.0%	55.1%	33.6%	0.0%	4.7%	0.0%	0.9%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	1.4%	0.0%	0.0%	10.4%	63.5%	0.0%	0.0%	0.0%	19.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	3.9%	0.0%	4.4%	0.0%	4.8%	0.0%	0.0%	1.8%	0.0%	0.0%	3.5%	45.6%	0.0%	3.5%	0.0%	32.5%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	25.7%	60.3%	0.0%	0.0%	0.0%	9.6%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	2.3%	0.4%	2.0%	0.0%	0.4%	0.0%	0.0%	14.1%	56.5%	0.0%	0.0%	0.0%	23.6%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.4%	0.0%	2.5%	0.0%	0.0%	8.2%	61.9%	0.0%	0.0%	0.0%	25.9%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.8%	0.0%	2.9%	0.0%	0.2%	0.0%	1.4%	0.0%	0.2%	12.6%	52.1%	0.0%	0.0%	0.0%	29.6%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	1.3%	0.0%	1.0%	0.0%	6.3%	0.0%	0.2%	12.0%	46.3%	0.0%	0.3%	0.0%	31.4%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.4%	0.0%	0.6%	0.0%	5.8%	0.0%	0.0%	14.0%	48.1%	0.0%	0.4%	0.0%	28.6%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	1.3%	0.0%	1.3%	0.0%	0.0%	0.0%	4.1%	0.0%	0.0%	9.8%	46.0%	0.0%	0.0%	0.0%	36.7%
1992	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	0.7%	0.0%	2.1%	0.0%	2.6%	0.0%	2.7%	0.0%	0.5%	6.8%	48.5%	0.0%	0.7%	0.0%	32.9%
1993	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	2.8%	0.0%	0.0%	2.5%	39.4%	0.0%	0.6%	0.0%	54.1%
1994	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	1.4%	59.6%	0.0%	0.0%	0.0%	35.7%
1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	26.2%	0.0%	0.0%	0.0%	73.5%
1996	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	56.4%	0.0%	0.0%	0.0%	40.5%
1997	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	47.7%	0.0%	0.0%	0.0%	50.0%
1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	1.4%	33.3%	0.0%	0.0%	0.0%	63.8%
1999	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	45.2%	0.0%	0.0%	0.0%	51.0%
2000	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	44.2%	0.0%	0.0%	0.0%	49.5%
2006	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.1%	0.2%	14.3%	0.0%	1.7%	0.0%	79.9%
2007	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.5%	0.2%	19.3%	0.0%	2.3%	0.0%	76.4%
1983-2007	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.2%	0.2%	1.0%	0.3%	0.6%	0.0%	1.6%	0.0%	0.1%	8.7%	45.1%	0.0%	0.7%	0.0%	40.2%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	1.5%	0.6%	1.9%	0.5%	0.0%	1.4%	0.0%	0.0%	23.0%	47.6%	0.0%	2.7%	0.0%	17.4%
1985-1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.4%	0.0%	1.3%	0.0%	0.9%	0.0%	2.4%	0.0%	0.1%	9.8%	49.5%	0.0%	0.2%	0.0%	34.7%
1996-1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	1.5%	45.8%	0.0%	0.0%	0.0%	51.4%
1999-2007	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.7%	0.0%	0.1%	0.6%	30.7%	0.0%	1.0%	0.0%	64.2%



**Appendix C.47. Percent distribution of Hoko Fall Fingerling reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM														Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WV/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1989	4.8%	0.8%	0.0%	7.7%	0.0%	10.9%	0.0%	0.0%	1.6%	0.4%	21.4%	0.0%	0.8%	0.0%	0.4%	0.4%	21.4%	0.0%	0.0%	0.0%	29.4%	
1990	15.8%	1.9%	0.5%	8.0%	0.0%	17.0%	0.0%	0.5%	0.3%	0.7%	4.3%	0.0%	0.5%	0.0%	0.0%	0.7%	14.5%	0.0%	0.2%	0.0%	35.2%	
1991	15.2%	0.0%	0.0%	5.0%	0.6%	6.9%	0.5%	0.0%	0.4%	1.1%	1.0%	0.0%	0.2%	0.0%	0.1%	1.0%	8.1%	0.0%	0.1%	0.0%	59.8%	
1992	7.7%	1.7%	1.2%	4.4%	0.7%	9.8%	2.1%	0.0%	0.5%	1.2%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.2%	0.0%	66.6%	
1993	6.6%	0.0%	2.0%	6.6%	0.0%	14.9%	0.0%	0.0%	0.3%	0.0%	5.3%	0.0%	0.0%	0.0%	0.3%	0.0%	4.3%	0.0%	0.3%	0.0%	59.4%	
1994	13.6%	2.1%	2.4%	14.8%	0.0%	11.4%	2.1%	0.0%	2.1%	0.6%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	47.9%	
1995	12.5%	0.0%	4.1%	6.1%	0.8%	2.9%	0.0%	0.0%	0.8%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	71.6%	
1996	10.5%	0.0%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	85.3%	
1997	13.9%	0.0%	0.0%	1.7%	0.6%	0.9%	0.6%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	81.7%	
1998	9.0%	0.0%	0.4%	5.9%	0.0%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	84.1%	
1999	6.6%	0.0%	0.7%	4.3%	1.0%	0.0%	1.4%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	85.7%	
2000	4.4%	0.2%	1.8%	0.0%	0.0%	0.2%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	92.0%	
2001	6.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	90.1%	
2002	17.1%	0.0%	0.9%	4.3%	4.0%	1.6%	0.0%	0.0%	2.1%	0.3%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	68.8%	
2003	13.8%	0.1%	2.6%	3.0%	0.0%	0.0%	0.5%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	78.2%	
2004	10.9%	0.0%	1.0%	8.4%	0.9%	0.7%	0.9%	0.0%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.5%	0.0%	0.0%	0.0%	71.8%	
2005	11.3%	0.2%	1.2%	10.9%	4.6%	0.0%	1.2%	0.0%	4.8%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	64.1%	
2006	9.5%	1.3%	2.2%	5.8%	4.1%	0.0%	1.2%	0.0%	0.6%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	74.1%	
2007	17.0%	0.3%	3.9%	8.7%	14.5%	0.8%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	1.1%	0.0%	0.0%	0.0%	51.7%	
1983-2007	10.9%	0.5%	1.6%	5.6%	1.7%	4.1%	0.6%	0.0%	1.3%	0.2%	1.9%	0.0%	0.2%	0.0%	0.2%	0.1%	2.9%	0.0%	0.1%	0.0%	68.3%	
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
1985-1995	10.9%	0.9%	1.5%	7.5%	0.3%	10.5%	0.7%	0.1%	0.9%	0.6%	5.2%	0.0%	0.2%	0.0%	0.1%	0.3%	7.3%	0.0%	0.1%	0.0%	52.9%	
1996-1998	11.1%	0.0%	1.4%	2.5%	0.2%	0.3%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%	0.0%	83.7%	
1999-2007	10.7%	0.2%	1.8%	5.0%	3.2%	0.4%	0.6%	0.0%	2.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	75.2%	



**Appendix C.48. Percent distribution of Hoko Fall Fingerling total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WVOR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1989	11.6%	3.1%	0.3%	8.5%	0.0%	13.6%	0.0%	0.0%	1.7%	1.1%	16.1%	0.0%	0.6%	0.0%	0.6%	1.4%	20.9%	0.0%	0.0%	0.0%	20.6%
1990	18.5%	4.8%	0.6%	8.4%	0.0%	16.9%	0.0%	0.4%	0.3%	0.9%	3.6%	0.0%	0.6%	0.0%	0.0%	0.6%	14.1%	0.0%	0.1%	0.0%	30.1%
1991	18.8%	0.0%	0.1%	5.2%	0.5%	7.0%	0.4%	0.0%	0.4%	1.1%	0.9%	0.0%	0.2%	0.0%	0.1%	0.9%	8.7%	0.0%	0.1%	0.0%	55.5%
1992	8.5%	4.9%	1.6%	5.5%	0.8%	10.3%	2.1%	0.0%	0.6%	1.1%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	0.2%	0.0%	60.3%
1993	12.3%	1.1%	2.3%	7.7%	0.0%	14.9%	0.0%	0.0%	0.6%	0.0%	4.6%	0.0%	0.0%	0.0%	0.6%	0.0%	4.3%	0.0%	0.3%	0.0%	51.4%
1994	20.8%	4.8%	2.8%	13.5%	0.0%	10.7%	1.8%	0.0%	2.0%	0.5%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	40.4%
1995	16.3%	0.0%	4.7%	7.8%	0.8%	3.7%	0.0%	0.0%	0.8%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	64.4%
1996	14.0%	0.0%	4.4%	0.7%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	79.2%
1997	16.5%	0.0%	0.0%	1.8%	0.7%	1.1%	0.5%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	78.6%
1998	10.0%	0.0%	0.3%	6.4%	0.0%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	82.8%
1999	7.9%	0.0%	0.7%	4.7%	1.1%	0.0%	1.5%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	83.7%
2000	6.0%	0.2%	2.9%	0.0%	0.0%	0.2%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	89.0%
2001	8.7%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	85.8%
2002	19.5%	0.0%	1.0%	4.7%	4.7%	1.5%	0.0%	0.0%	2.2%	0.3%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	65.0%
2003	15.0%	0.2%	2.9%	3.3%	0.0%	0.0%	0.6%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	76.2%
2004	12.5%	0.0%	1.2%	9.3%	1.2%	0.7%	0.9%	0.0%	5.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.6%	0.0%	0.0%	0.0%	68.1%
2005	12.8%	0.2%	1.3%	12.2%	5.7%	0.0%	1.3%	0.0%	5.4%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	59.2%
2006	10.7%	1.9%	2.3%	6.3%	4.7%	0.0%	1.4%	0.0%	0.6%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	70.9%
2007	17.7%	0.5%	4.0%	8.5%	16.4%	0.8%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	1.3%	0.0%	0.0%	0.0%	48.9%
1983-2007	13.6%	1.1%	1.9%	6.0%	1.9%	4.3%	0.6%	0.0%	1.4%	0.3%	1.6%	0.0%	0.2%	0.0%	0.2%	0.2%	2.9%	0.0%	0.1%	0.0%	63.7%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	15.3%	2.7%	1.8%	8.1%	0.3%	11.0%	0.6%	0.1%	0.9%	0.7%	4.3%	0.0%	0.2%	0.0%	0.2%	0.4%	7.4%	0.0%	0.1%	0.0%	46.1%
1996-1998	13.5%	0.0%	1.6%	3.0%	0.2%	0.8%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	80.2%
1999-2007	12.3%	0.3%	2.1%	5.4%	3.8%	0.4%	0.6%	0.0%	2.2%	0.0%	0.0%	0.0%	0.3%	0.0%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	71.9%

Appendix C.49. Percent distribution of Sooes Fall Fingerling reported catch among fisheries and escapement.

Catch Year	AABM							ISSM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WAVR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1989	7.0%	1.3%	0.0%	0.0%	0.0%	1.9%	8.2%	0.0%	0.0%	0.0%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	75.3%
1990	9.9%	2.8%	4.3%	14.2%	0.0%	17.7%	0.0%	0.0%	7.1%	1.4%	2.8%	0.0%	1.4%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	34.8%
1991	11.9%	0.0%	0.0%	9.9%	0.0%	5.2%	0.0%	0.0%	0.0%	0.0%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	4.9%	0.0%	0.0%	0.0%	64.3%
1992	8.5%	0.0%	0.0%	9.5%	0.0%	19.3%	1.7%	0.0%	1.0%	2.0%	3.4%	0.0%	0.3%	0.0%	0.7%	0.0%	1.7%	0.0%	0.0%	0.0%	51.9%
1993	4.6%	0.0%	0.0%	7.6%	2.1%	16.0%	0.0%	0.0%	0.0%	2.1%	2.1%	0.0%	0.4%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	64.1%
1994	17.0%	3.0%	4.0%	10.5%	1.0%	8.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	55.5%
1995	8.5%	0.0%	0.0%	4.6%	0.0%	9.8%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	73.9%
1996	8.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	90.3%
1997	10.3%	0.0%	5.2%	5.5%	0.0%	0.0%	2.8%	0.0%	1.4%	0.7%	0.3%	0.0%	1.0%	0.0%	0.0%	2.8%	0.0%	0.0%	20.7%	0.0%	49.3%
1998	9.0%	0.0%	1.5%	17.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	72.0%
1999	12.3%	0.0%	12.3%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	70.5%
2000	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	8.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	89.0%
2001	6.1%	0.0%	2.0%	0.0%	0.0%	0.0%	2.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	88.5%
2002	10.7%	0.2%	1.3%	2.8%	2.1%	0.8%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	60.4%
2003	12.0%	0.1%	0.0%	4.8%	2.6%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.7%	0.0%	25.1%	0.0%	52.8%
2004	17.4%	0.5%	2.0%	14.9%	0.0%	0.8%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%	61.0%
2005	27.0%	0.0%	2.3%	25.2%	6.1%	1.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.8%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	34.0%
2006	22.4%	1.4%	2.7%	26.5%	3.7%	1.4%	2.7%	0.0%	5.0%	0.0%	0.0%	0.0%	0.5%	0.0%	1.4%	0.0%	1.6%	0.0%	0.0%	0.0%	30.8%
2007	12.7%	0.0%	0.0%	27.0%	33.3%	0.0%	0.0%	0.0%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.8%
1983-2007	11.4%	0.5%	2.1%	9.7%	2.7%	4.3%	1.5%	0.0%	1.4%	0.4%	1.0%	0.0%	0.2%	0.0%	0.5%	0.2%	0.5%	0.0%	2.5%	0.0%	61.0%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	9.6%	1.0%	1.2%	8.0%	0.4%	11.1%	1.4%	0.0%	1.2%	0.9%	2.7%	0.0%	0.3%	0.0%	0.6%	0.0%	1.1%	0.0%	0.4%	0.0%	60.0%
1996-1998	9.3%	0.0%	2.2%	7.7%	0.0%	0.0%	0.9%	0.0%	0.5%	0.2%	0.3%	0.0%	0.3%	0.0%	0.2%	0.9%	0.0%	0.0%	6.9%	0.0%	70.5%
1999-2007	13.4%	0.2%	2.8%	11.7%	5.3%	0.4%	1.7%	0.0%	1.8%	0.0%	0.0%	0.0%	0.1%	0.1%	0.6%	0.1%	0.3%	0.0%	2.8%	0.0%	58.6%

**Appendix C.50. Percent distribution of Sooes Fall Fingerling total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM														Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WV/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1989	11 0%	3 7%	0 5%	3 1%	0 0%	4 7%	7 3%	0 0%	0 0%	0 0%	5 8%	0 0%	0 0%	0 0%	0 0%	0 0%	1 6%	0 0%	0 0%	0 0%	62 3%	
1990	11 6%	7 0%	4 1%	16 3%	0 0%	17 4%	0 0%	0 0%	6 4%	1 7%	2 3%	0 0%	1 7%	0 0%	2 9%	0 0%	0 0%	0 0%	0 0%	0 0%	28 5%	
1991	14 1%	0 0%	0 3%	10 6%	0 0%	7 2%	0 0%	0 0%	0 0%	0 3%	3 5%	0 0%	0 0%	0 0%	0 0%	0 0%	5 1%	0 0%	0 0%	0 0%	59 0%	
1992	11 0%	0 3%	0 3%	10 7%	0 0%	20 4%	1 5%	0 0%	1 2%	2 1%	3 0%	0 0%	0 3%	0 0%	0 6%	0 0%	1 8%	0 0%	0 0%	0 0%	46 6%	
1993	7 5%	0 4%	0 0%	7 9%	2 0%	16 9%	0 0%	0 0%	0 0%	2 0%	2 0%	0 0%	0 4%	0 0%	0 0%	0 0%	1 2%	0 0%	0 0%	0 0%	59 8%	
1994	21 0%	7 4%	3 5%	9 6%	0 9%	7 4%	0 0%	0 0%	0 0%	0 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 9%	0 0%	0 0%	0 0%	0 0%	48 5%	
1995	14 9%	0 0%	0 0%	6 1%	0 0%	12 7%	0 0%	0 0%	0 0%	0 0%	1 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 2%	0 0%	62 4%	
1996	15 5%	0 0%	0 0%	0 9%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 4%	0 0%	0 0%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	82 3%	
1997	12 0%	0 0%	5 8%	5 8%	0 0%	0 0%	2 6%	0 0%	1 3%	0 6%	0 6%	0 0%	1 0%	0 0%	0 0%	3 9%	0 0%	0 0%	19 8%	0 0%	46 4%	
1998	10 3%	0 0%	1 8%	19 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	68 7%	
1999	13 5%	0 0%	13 5%	4 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 3%	0 0%	0 0%	0 0%	0 0%	67 4%	
2000	0 0%	0 0%	5 7%	0 0%	0 0%	0 0%	10 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	83 9%	
2001	9 6%	0 0%	2 9%	0 0%	0 0%	0 0%	2 6%	0 0%	1 6%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	83 4%	
2002	13 2%	0 4%	1 6%	3 4%	2 7%	0 7%	0 0%	0 0%	1 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 7%	0 0%	0 0%	0 0%	0 0%	0 0%	76 3%	
2003	14 0%	0 4%	0 0%	5 5%	3 2%	0 0%	0 0%	0 0%	1 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 6%	0 0%	0 9%	0 0%	24 6%	0 0%	49 5%	
2004	19 3%	1 4%	2 1%	16 1%	0 0%	0 7%	1 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 8%	0 4%	0 4%	0 0%	0 5%	0 0%	0 0%	0 0%	56 7%	
2005	27 5%	0 0%	2 3%	25 6%	7 3%	1 0%	0 0%	0 0%	1 7%	0 0%	0 0%	0 0%	0 8%	0 0%	1 9%	0 0%	0 0%	0 0%	0 0%	0 0%	31 9%	
2006	22 8%	1 7%	2 6%	26 7%	3 9%	1 3%	3 0%	0 0%	5 2%	0 0%	0 0%	0 0%	0 4%	0 0%	1 3%	0 0%	2 2%	0 0%	0 0%	0 0%	28 9%	
2007	11 8%	0 0%	0 0%	26 5%	36 8%	0 0%	0 0%	0 0%	5 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	19 1%	
1983-2007	13 7%	1 2%	2 5%	10 4%	3 0%	4 8%	1 5%	0 0%	1 4%	0 4%	1 0%	0 0%	0 2%	0 0%	0 5%	0 3%	0 7%	0 0%	2 5%	0 0%	55 9%	
1979-1984	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	
1985-1995	13 0%	2 7%	1 2%	9 2%	0 4%	12 4%	1 3%	0 0%	1 1%	1 0%	2 6%	0 0%	0 3%	0 0%	0 5%	0 1%	1 4%	0 0%	0 3%	0 0%	52 5%	
1996-1998	12 6%	0 0%	2 5%	8 6%	0 0%	0 1%	0 9%	0 0%	0 4%	0 2%	0 4%	0 0%	0 3%	0 0%	0 1%	1 3%	0 0%	0 0%	6 6%	0 0%	65 8%	
1999-2007	14 6%	0 4%	3 4%	12 0%	6 0%	0 4%	2 0%	0 0%	1 9%	0 0%	0 0%	0 0%	0 1%	0 1%	0 6%	0 1%	0 4%	0 0%	2 7%	0 0%	55 2%	

Appendix C.51. Percent distribution of Queets Fall Fingerling reported catch among fisheries and escapement.

Catch Year	AABM							ISBM														Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1981	9.5%	0.0%	0.0%	13.7%	0.0%	11.6%	0.0%	0.0%	0.0%	2.1%	3.2%	0.0%	1.1%	6.3%	0.0%	0.0%	3.2%	0.0%	25.3%	0.0%	24.2%	
1982	12.6%	2.6%	0.0%	18.2%	1.3%	13.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	10.4%	0.0%	0.0%	0.0%	0.0%	16.9%	0.0%	24.2%	
1983	29.9%	0.0%	0.0%	16.3%	0.0%	6.8%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	0.7%	11.6%	0.0%	1.4%	0.0%	0.0%	10.2%	0.0%	20.4%	
1984	16.1%	0.7%	0.0%	19.6%	2.1%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	4.9%	0.0%	0.0%	0.0%	0.0%	23.8%	0.0%	23.1%	
1985	15.6%	0.0%	0.0%	31.6%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	2.0%	0.0%	0.0%	1.2%	0.0%	12.4%	0.0%	33.6%	
1986	17.3%	0.0%	1.1%	11.6%	0.0%	7.0%	0.0%	0.0%	0.0%	1.8%	1.1%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	7.4%	0.0%	50.4%	
1987	22.3%	0.2%	0.0%	11.7%	0.9%	0.7%	0.0%	0.0%	0.0%	0.9%	0.6%	0.0%	0.6%	1.5%	0.0%	0.2%	0.6%	0.0%	21.0%	0.0%	38.7%	
1988	14.4%	0.6%	1.7%	7.8%	0.0%	4.0%	1.1%	0.0%	0.0%	2.5%	0.4%	0.0%	0.0%	0.6%	0.0%	0.0%	3.3%	0.0%	15.8%	0.0%	47.3%	
1989	11.1%	0.0%	0.0%	9.1%	1.1%	7.6%	0.0%	0.0%	0.0%	0.5%	0.2%	0.0%	0.0%	0.5%	0.0%	0.0%	1.6%	0.0%	27.2%	0.0%	41.1%	
1990	12.6%	0.0%	0.0%	5.5%	1.8%	6.6%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	13.0%	0.0%	58.9%	
1991	20.5%	0.2%	1.1%	9.7%	1.3%	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.5%	0.0%	15.4%	0.0%	46.3%	
1992	8.4%	0.6%	2.2%	7.8%	1.9%	17.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	1.0%	0.8%	0.0%	0.0%	0.0%	18.4%	0.0%	41.7%	
1993	15.5%	0.0%	0.7%	14.0%	2.1%	12.6%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.5%	0.0%	2.0%	0.0%	0.8%	0.0%	16.0%	0.0%	35.6%	
1994	16.1%	0.3%	0.5%	21.7%	1.5%	4.1%	1.0%	0.0%	0.3%	0.2%	0.4%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	20.9%	0.0%	32.4%	
1995	17.2%	0.0%	1.6%	6.0%	4.1%	0.7%	0.4%	0.0%	0.3%	0.0%	0.1%	0.0%	0.7%	0.0%	0.0%	0.3%	0.0%	0.0%	32.8%	0.0%	35.9%	
1996	10.4%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.5%	0.6%	70.2%	
1997	34.5%	0.3%	0.0%	6.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.8%	0.0%	37.4%	
1998	23.7%	0.0%	3.0%	19.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	12.1%	4.4%	37.0%	
1999	9.2%	0.0%	1.4%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.3%	0.0%	0.0%	0.0%	8.2%	0.0%	78.3%	
2000	23.7%	0.0%	10.0%	10.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	0.0%	51.6%	
2001	23.4%	0.0%	5.6%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	1.3%	0.7%	0.0%	0.0%	0.0%	40.6%	0.0%	22.3%	
2002	25.5%	0.0%	3.3%	4.8%	2.2%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	24.9%	0.0%	38.8%	
2003	20.9%	0.1%	3.6%	10.7%	4.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.7%	0.0%	0.0%	0.0%	21.2%	0.0%	37.9%	
2004	15.1%	0.4%	3.1%	6.7%	7.2%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.3%	0.1%	0.0%	0.0%	0.0%	11.5%	0.0%	53.7%	
2005	14.4%	0.0%	3.3%	6.6%	2.5%	3.5%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.1%	0.0%	0.5%	0.0%	0.0%	0.0%	20.0%	0.0%	48.5%	
2006	21.8%	0.3%	2.4%	12.0%	5.0%	3.8%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.6%	0.2%	0.0%	0.0%	0.0%	14.9%	0.0%	38.0%	
2007	25.2%	0.0%	3.2%	9.6%	24.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.3%	0.1%	0.0%	0.0%	0.0%	14.5%	0.0%	20.2%	
1983-2007	16.0%	0.2%	1.6%	11.0%	2.4%	4.3%	0.1%	0.0%	0.0%	0.3%	0.4%	0.0%	0.3%	1.7%	0.2%	0.1%	0.4%	0.0%	18.0%	0.2%	40.3%	
1979-1984	17.0%	0.6%	0.0%	16.9%	0.6%	9.6%	0.0%	0.0%	0.0%	0.5%	1.7%	0.0%	1.0%	6.3%	0.0%	0.3%	0.8%	0.0%	19.0%	0.0%	23.0%	
1985-1995	15.5%	0.2%	0.6%	12.4%	1.3%	6.1%	0.2%	0.0%	0.1%	0.6%	0.4%	0.0%	0.2%	0.9%	0.2%	0.0%	0.7%	0.0%	18.2%	0.0%	42.0%	
1996-1998	22.8%	0.1%	1.5%	8.4%	0.0%	0.1%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	16.8%	1.6%	48.2%	
1999-2007	19.9%	0.1%	4.0%	7.6%	5.0%	1.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.4%	0.4%	0.3%	0.0%	0.0%	0.0%	17.7%	0.0%	43.3%	



**Appendix C.52. Percent distribution of Queets Fall Fingerling total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo St		Canada		WV/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1981	12.9%	0.0%	0.0%	18.1%	0.0%	12.9%	0.0%	0.0%	0.0%	1.7%	2.6%	0.0%	1.7%	5.2%	0.0%	0.0%	3.4%	0.0%	21.6%	0.0%	19.8%
1982	14.7%	2.4%	0.0%	19.8%	1.2%	12.7%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	9.9%	0.0%	0.4%	0.0%	0.0%	15.9%	0.0%	22.2%
1983	46.5%	0.0%	0.0%	13.1%	0.0%	5.1%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.5%	8.6%	0.0%	1.5%	0.0%	0.0%	7.6%	0.0%	15.2%
1984	20.9%	0.6%	0.0%	20.2%	2.5%	7.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	4.3%	0.0%	0.0%	0.0%	0.0%	21.5%	0.0%	20.2%
1985	20.2%	0.0%	0.0%	33.6%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	1.7%	0.0%	0.0%	1.7%	0.0%	10.6%	0.0%	28.8%
1986	26.8%	0.0%	1.2%	11.0%	0.0%	6.8%	0.0%	0.0%	0.0%	1.5%	0.9%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	7.1%	0.0%	42.6%
1987	28.7%	0.5%	0.0%	11.7%	1.0%	1.3%	0.0%	0.0%	0.0%	0.8%	0.5%	0.0%	0.5%	1.3%	0.0%	0.2%	0.7%	0.0%	18.7%	0.0%	34.2%
1988	17.4%	2.4%	1.6%	9.4%	0.1%	5.6%	1.0%	0.0%	0.0%	2.4%	0.4%	0.0%	0.0%	0.7%	0.0%	0.0%	3.4%	0.0%	14.1%	0.0%	41.5%
1989	17.0%	0.2%	0.2%	10.6%	1.1%	8.9%	0.0%	0.0%	0.0%	0.6%	0.3%	0.0%	0.0%	0.5%	0.0%	0.0%	1.7%	0.0%	23.8%	0.0%	35.3%
1990	15.5%	0.1%	0.1%	6.4%	1.9%	7.1%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	12.5%	0.0%	54.9%
1991	24.5%	0.3%	1.2%	10.1%	1.4%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.5%	0.0%	14.3%	0.0%	42.5%
1992	15.5%	2.2%	2.4%	8.7%	1.8%	17.5%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.8%	0.8%	0.0%	0.0%	0.0%	15.5%	0.0%	34.6%
1993	19.9%	0.0%	0.7%	15.2%	2.0%	13.4%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.4%	0.0%	1.8%	0.0%	1.0%	0.0%	14.2%	0.0%	31.0%
1994	24.8%	0.6%	0.4%	20.9%	1.5%	4.0%	1.0%	0.0%	0.2%	0.2%	0.3%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	17.9%	0.0%	27.6%
1995	21.9%	0.0%	1.8%	7.3%	4.7%	0.8%	0.4%	0.0%	0.2%	0.0%	0.2%	0.0%	0.7%	0.0%	0.0%	0.4%	0.0%	0.0%	29.5%	0.0%	32.0%
1996	18.8%	0.0%	1.5%	1.1%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.8%	0.5%	61.7%
1997	38.5%	0.5%	0.0%	6.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.5%	0.0%	34.6%
1998	25.6%	0.0%	3.1%	19.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	11.5%	4.4%	34.8%
1999	13.1%	0.0%	1.9%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.3%	0.0%	0.0%	0.0%	7.8%	0.0%	74.0%
2000	27.9%	0.0%	12.5%	11.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	0.0%	44.8%
2001	29.1%	0.0%	6.7%	4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	1.2%	0.6%	0.0%	0.0%	0.0%	36.6%	0.0%	19.7%
2002	29.3%	0.0%	3.6%	5.1%	2.6%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	23.2%	0.0%	35.5%
2003	23.1%	0.1%	4.0%	11.5%	5.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.7%	0.0%	0.0%	0.0%	19.8%	0.0%	34.9%
2004	17.4%	1.4%	3.2%	7.1%	9.1%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	10.7%	0.0%	49.0%
2005	15.8%	0.0%	3.5%	7.2%	3.0%	3.6%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.1%	0.0%	0.5%	0.0%	0.0%	0.0%	19.4%	0.0%	46.7%
2006	24.0%	0.4%	2.5%	12.5%	5.7%	3.7%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.6%	0.2%	0.0%	0.0%	0.0%	14.0%	0.0%	35.3%
2007	28.1%	0.0%	3.1%	8.9%	26.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.3%	0.1%	0.0%	0.0%	0.0%	13.1%	0.0%	18.2%
1983-2007	22.9%	0.4%	2.0%	11.6%	2.6%	4.5%	0.1%	0.0%	0.0%	0.3%	0.4%	0.0%	0.4%	1.5%	0.2%	0.1%	0.5%	0.0%	16.3%	0.2%	36.0%
1979-1984	23.7%	0.7%	0.0%	17.8%	0.9%	9.5%	0.0%	0.0%	0.0%	0.4%	1.4%	0.0%	1.2%	7.0%	0.0%	0.5%	0.9%	0.0%	16.6%	0.0%	19.4%
1985-1995	21.1%	0.6%	0.9%	13.2%	1.4%	6.6%	0.2%	0.0%	0.0%	0.6%	0.4%	0.0%	0.1%	0.8%	0.2%	0.0%	0.8%	0.0%	16.2%	0.0%	36.8%
1996-1998	27.6%	0.2%	1.5%	9.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	15.6%	1.6%	43.7%
1999-2007	23.1%	0.2%	4.6%	7.8%	5.7%	1.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.4%	0.4%	0.3%	0.0%	0.0%	0.0%	16.5%	0.0%	39.6%

**Appendix C.53. Percent distribution of Willamette Spring reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1980	3.5%	0.5%	0.1%	5.8%	0.1%	2.7%	0.0%	0.0%	0.0%	0.1%	0.5%	0.0%	0.5%	0.0%	0.7%	0.0%	0.1%	0.0%	0.3%	7.6%	77.5%
1981	4.5%	0.6%	0.1%	6.2%	0.0%	1.4%	0.0%	0.0%	0.0%	0.4%	0.1%	0.0%	0.4%	0.0%	0.3%	0.0%	0.0%	0.0%	1.6%	9.3%	75.2%
1982	4.1%	1.1%	0.1%	6.6%	0.1%	4.1%	0.0%	0.0%	0.0%	0.1%	0.4%	0.0%	1.1%	0.0%	1.8%	0.1%	0.1%	0.0%	7.2%	23.0%	50.1%
1983	12.8%	0.1%	0.0%	12.0%	0.0%	1.9%	0.0%	0.5%	0.3%	0.3%	0.0%	0.0%	1.9%	0.0%	0.5%	0.0%	0.5%	0.0%	6.5%	20.3%	42.6%
1984	4.0%	0.3%	0.3%	2.1%	0.1%	1.9%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	1.0%	0.0%	0.0%	0.0%	0.2%	0.0%	6.2%	23.8%	59.8%
1985	5.1%	0.1%	0.0%	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.3%	0.0%	0.0%	0.2%	0.0%	0.0%	18.1%	20.5%	54.6%
1986	3.1%	0.4%	0.0%	6.6%	0.0%	5.5%	0.6%	0.0%	0.0%	0.6%	2.5%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	9.2%	16.4%	54.4%
1987	9.8%	0.0%	0.6%	13.3%	0.0%	0.9%	1.3%	0.0%	0.0%	0.8%	1.1%	0.0%	2.4%	0.0%	0.0%	0.0%	0.3%	0.0%	6.3%	26.7%	36.5%
1988	8.6%	0.2%	0.4%	6.2%	0.0%	3.1%	0.0%	0.0%	0.0%	0.6%	0.1%	0.0%	2.2%	0.0%	0.2%	0.0%	0.0%	0.0%	6.9%	28.6%	42.9%
1989	4.4%	0.0%	0.2%	1.8%	0.0%	1.4%	0.5%	0.0%	0.5%	0.0%	0.3%	0.0%	1.5%	0.0%	0.2%	0.0%	0.1%	0.0%	12.6%	20.0%	56.6%
1990	6.3%	0.3%	0.2%	1.4%	0.2%	2.1%	0.7%	0.0%	0.0%	0.2%	0.6%	0.0%	1.3%	0.0%	0.1%	0.0%	0.0%	0.0%	17.0%	27.6%	42.0%
1991	3.1%	1.2%	0.6%	1.7%	0.0%	0.4%	0.2%	0.0%	0.2%	0.0%	0.2%	0.0%	0.7%	0.0%	0.2%	0.0%	0.0%	0.0%	6.0%	42.6%	43.0%
1992	3.5%	1.3%	0.2%	1.7%	0.2%	2.7%	0.2%	0.0%	0.0%	0.0%	0.2%	0.0%	2.4%	0.0%	0.4%	0.0%	0.3%	0.0%	5.8%	30.6%	50.4%
1993	8.1%	0.0%	0.0%	1.3%	0.1%	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.8%	43.0%	43.6%
1994	4.1%	0.3%	0.9%	0.7%	0.1%	0.7%	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%	0.2%	0.0%	0.1%	0.0%	0.1%	0.0%	5.1%	38.6%	48.8%
1995	2.8%	0.1%	0.3%	1.0%	0.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.3%	43.6%	50.9%
1996	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	1.2%	7.7%	88.6%
1997	3.6%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	15.8%	79.0%
1998	4.2%	0.1%	0.2%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.4%	16.2%	78.5%
1999	4.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.8%	14.6%	79.3%
2000	7.8%	0.1%	0.4%	0.1%	0.7%	0.3%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	2.3%	29.3%	58.0%
2001	1.4%	0.0%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.1%	0.0%	3.5%	23.1%	70.8%
2002	1.6%	0.1%	0.1%	0.9%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.2%	0.0%	0.0%	0.0%	15.8%	20.0%	59.4%
2003	4.8%	0.0%	0.1%	0.4%	0.2%	2.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	1.5%	15.6%	74.6%
2004	2.9%	0.3%	0.1%	0.6%	0.0%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	6.1%	20.1%	62.7%
2005	2.7%	0.0%	0.1%	0.3%	0.3%	5.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.1%	0.0%	0.1%	0.0%	5.0%	15.5%	69.7%
2006	3.0%	0.0%	0.0%	0.3%	0.4%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.3%	0.0%	7.9%	24.5%	58.1%
2007	3.9%	0.1%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	4.8%	17.7%	71.6%
1983-2007	4.7%	0.3%	0.2%	2.6%	0.1%	1.8%	0.2%	0.0%	0.0%	0.1%	0.2%	0.0%	0.9%	0.0%	0.2%	0.0%	0.1%	0.0%	5.7%	22.9%	60.0%
1979-1984	5.8%	0.5%	0.1%	6.6%	0.1%	2.4%	0.0%	0.1%	0.1%	0.2%	0.2%	0.0%	1.0%	0.0%	0.6%	0.0%	0.2%	0.0%	4.4%	16.8%	61.0%
1985-1995	5.4%	0.4%	0.3%	3.3%	0.0%	1.7%	0.3%	0.0%	0.1%	0.2%	0.5%	0.0%	1.1%	0.0%	0.2%	0.0%	0.1%	0.0%	8.0%	30.7%	47.6%
1996-1998	3.3%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	0.8%	13.2%	82.0%
1999-2007	3.6%	0.1%	0.1%	0.3%	0.2%	2.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.1%	0.0%	0.0%	0.0%	5.3%	20.0%	67.1%



**Appendix C.54. Percent distribution of Willamette Spring total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1980	5 0%	0 5%	0 2%	8 1%	0 1%	3 4%	0 0%	0 0%	0 0%	0 2%	0 5%	0 0%	0 7%	0 0%	0 8%	0 0%	0 0%	0 0%	0 4%	7 6%	72 5%
1981	5 7%	0 6%	0 1%	8 0%	0 0%	1 8%	0 0%	0 0%	0 0%	0 5%	0 1%	0 0%	0 4%	0 0%	0 3%	0 0%	0 0%	0 0%	1 6%	9 5%	71 4%
1982	5 8%	1 2%	0 2%	8 2%	0 1%	5 1%	0 0%	0 0%	0 0%	0 1%	0 4%	0 0%	1 3%	0 0%	1 9%	0 2%	0 2%	0 0%	6 8%	22 7%	45 9%
1983	18 9%	0 1%	0 0%	13 2%	0 0%	2 0%	0 0%	0 5%	0 3%	0 3%	0 0%	0 0%	2 1%	0 0%	0 5%	0 0%	0 7%	0 0%	5 9%	18 8%	36 6%
1984	4 6%	0 3%	0 4%	2 5%	0 1%	2 1%	0 0%	0 0%	0 1%	0 1%	0 1%	0 0%	1 2%	0 0%	0 0%	0 0%	0 2%	0 0%	6 3%	24 5%	57 6%
1985	7 9%	0 3%	0 0%	0 5%	0 0%	0 6%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 3%	0 0%	0 0%	0 2%	0 0%	0 0%	17 5%	20 8%	51 8%
1986	4 9%	1 2%	0 0%	7 5%	0 0%	6 2%	0 7%	0 0%	0 0%	0 7%	2 6%	0 0%	0 0%	0 0%	0 8%	0 0%	0 0%	0 0%	8 8%	16 3%	50 3%
1987	18 8%	0 0%	1 0%	15 4%	0 0%	1 5%	1 2%	0 0%	0 0%	1 2%	1 0%	0 0%	3 1%	0 0%	0 0%	0 0%	0 6%	0 0%	5 3%	22 5%	28 4%
1988	11 5%	0 4%	0 6%	7 8%	0 0%	3 7%	0 0%	0 0%	0 0%	0 8%	0 0%	0 0%	2 4%	0 0%	0 2%	0 0%	0 0%	0 0%	6 5%	30 0%	36 0%
1989	5 7%	0 0%	0 2%	2 2%	0 0%	1 6%	0 6%	0 0%	0 6%	0 0%	0 2%	0 0%	1 7%	0 0%	0 2%	0 0%	0 1%	0 0%	12 2%	21 8%	52 8%
1990	10 3%	0 8%	0 3%	2 0%	0 2%	2 7%	0 7%	0 0%	0 0%	0 2%	0 6%	0 0%	1 5%	0 0%	0 1%	0 0%	0 0%	0 0%	15 6%	27 9%	37 3%
1991	4 1%	2 9%	0 7%	2 1%	0 0%	0 4%	0 2%	0 0%	0 2%	0 0%	0 2%	0 0%	0 7%	0 0%	0 2%	0 0%	0 0%	0 0%	5 7%	44 1%	38 5%
1992	7 7%	3 2%	0 2%	2 0%	0 2%	3 1%	0 2%	0 0%	0 0%	0 0%	0 2%	0 0%	2 8%	0 0%	0 4%	0 0%	0 6%	0 0%	5 3%	30 5%	43 5%
1993	13 5%	0 0%	0 0%	1 5%	0 1%	1 5%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	1 6%	0 0%	0 1%	0 0%	0 0%	0 0%	0 7%	43 8%	37 0%
1994	5 8%	0 7%	1 1%	0 9%	0 1%	0 8%	0 0%	0 0%	0 0%	0 3%	0 2%	0 0%	0 2%	0 0%	0 1%	0 0%	0 1%	0 0%	4 8%	40 4%	44 5%
1995	5 3%	0 1%	0 4%	1 4%	0 0%	0 5%	0 1%	0 0%	0 0%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 3%	45 7%	45 5%
1996	3 4%	0 0%	0 0%	0 2%	0 0%	0 1%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 1%	0 0%	0 0%	0 0%	0 1%	0 0%	1 2%	8 7%	85 9%
1997	4 5%	0 0%	0 0%	0 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 8%	17 2%	76 4%
1998	5 7%	0 4%	0 3%	0 0%	0 0%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 0%	0 4%	0 0%	0 4%	18 1%	74 4%
1999	9 2%	0 0%	1 0%	0 0%	0 0%	0 0%	0 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 0%	0 0%	0 0%	0 8%	15 8%	72 2%
2000	13 8%	0 2%	1 0%	0 1%	0 8%	0 3%	0 4%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 3%	0 0%	0 0%	0 0%	2 1%	31 2%	49 4%
2001	1 6%	0 1%	0 1%	0 1%	0 2%	0 5%	0 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 0%	0 0%	0 2%	0 0%	3 7%	26 7%	66 6%
2002	2 2%	0 3%	0 1%	1 0%	0 0%	0 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 9%	0 0%	0 3%	0 0%	0 0%	0 0%	15 3%	22 2%	56 8%
2003	6 0%	0 0%	0 1%	0 5%	0 2%	2 5%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	0 0%	0 2%	0 0%	0 0%	0 0%	1 5%	17 0%	71 5%
2004	3 8%	1 1%	0 1%	0 7%	0 0%	5 7%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 8%	0 0%	0 0%	0 0%	0 0%	0 0%	6 0%	22 4%	58 3%
2005	3 2%	0 0%	0 1%	0 3%	0 4%	5 6%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 0%	0 0%	0 1%	0 0%	0 1%	0 0%	5 0%	17 0%	67 1%
2006	4 3%	0 0%	0 0%	0 4%	0 5%	4 6%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 5%	0 0%	0 0%	0 0%	0 4%	0 0%	7 7%	27 0%	53 7%
2007	5 7%	0 4%	0 0%	0 0%	0 0%	1 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 8%	0 0%	0 0%	0 0%	0 0%	0 0%	4 8%	20 1%	67 0%
1983-2007	7 1%	0 5%	0 3%	3 1%	0 1%	2 1%	0 2%	0 0%	0 0%	0 2%	0 2%	0 0%	1 0%	0 0%	0 2%	0 0%	0 1%	0 0%	5 5%	23 9%	55 3%
1979-1984	8 0%	0 5%	0 2%	8 0%	0 1%	2 9%	0 0%	0 1%	0 1%	0 3%	0 2%	0 0%	1 1%	0 0%	0 7%	0 0%	0 2%	0 0%	4 2%	16 6%	56 8%
1985-1995	8 7%	0 9%	0 4%	3 9%	0 1%	2 1%	0 4%	0 0%	0 1%	0 3%	0 5%	0 0%	1 3%	0 0%	0 2%	0 0%	0 2%	0 0%	7 5%	31 3%	42 3%
1996-1998	4 6%	0 1%	0 1%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 1%	0 0%	0 2%	0 0%	0 0%	0 0%	0 2%	0 0%	0 8%	14 7%	78 9%
1999-2007	5 5%	0 2%	0 3%	0 3%	0 2%	2 4%	0 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 8%	0 0%	0 1%	0 0%	0 1%	0 0%	5 2%	22 2%	62 5%

**Appendix C.55. Percent distribution of Columbia River Summers reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM														Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1979	11 0%	0 0%	1 2%	7 3%	0 0%	16 5%	0 0%	3 0%	4 9%	2 4%	11 6%	0 0%	0 0%	0 0%	4 9%	0 0%	0 0%	0 0%	4 3%	0 0%	32 9%	
1980	33 1%	0 0%	0 9%	8 8%	0 0%	16 7%	0 0%	0 0%	0 0%	4 0%	1 2%	0 0%	1 5%	0 0%	0 0%	0 0%	0 0%	0 0%	0 6%	0 0%	33 1%	
1987	13 6%	0 0%	0 0%	5 6%	3 2%	0 0%	0 0%	0 0%	0 0%	4 8%	4 0%	0 0%	20 0%	0 0%	0 0%	0 0%	0 0%	0 0%	15 2%	0 0%	33 6%	
1988	1 1%	0 8%	0 0%	7 6%	1 9%	15 9%	4 2%	0 0%	0 0%	0 0%	9 1%	0 0%	3 4%	0 0%	0 0%	0 0%	0 0%	0 0%	15 2%	3 0%	37 9%	
1989	4 8%	0 5%	0 6%	5 1%	0 6%	14 8%	2 4%	0 0%	1 4%	0 6%	2 6%	0 0%	14 4%	0 0%	2 6%	0 0%	0 0%	0 0%	8 5%	0 0%	41 1%	
1990	9 7%	0 0%	0 0%	6 6%	0 0%	19 5%	0 0%	0 0%	0 6%	1 1%	1 7%	0 0%	5 7%	0 0%	2 3%	0 0%	0 0%	0 0%	10 8%	0 2%	41 8%	
1991	3 9%	0 0%	0 0%	2 2%	0 0%	5 7%	0 7%	0 0%	0 0%	0 5%	2 7%	0 0%	3 4%	0 0%	1 8%	0 0%	0 0%	0 0%	3 9%	0 4%	74 7%	
1992	14 1%	0 0%	0 0%	3 4%	0 0%	14 8%	0 0%	0 0%	0 7%	2 1%	1 0%	0 0%	6 5%	0 0%	0 0%	0 0%	1 4%	0 0%	1 4%	0 0%	54 6%	
1993	7 1%	0 0%	0 0%	1 4%	0 0%	14 3%	1 9%	0 0%	0 0%	0 0%	2 4%	0 0%	5 2%	0 0%	1 4%	0 0%	0 0%	0 0%	3 3%	0 0%	62 9%	
1994	13 5%	0 0%	0 0%	0 0%	13 5%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	10 8%	0 0%	62 2%	
1995	2 9%	0 0%	0 0%	0 0%	0 0%	5 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 2%	0 0%	0 0%	1 4%	0 0%	0 0%	0 0%	0 0%	88 4%	
1996	13 3%	0 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 2%	0 0%	2 8%	0 0%	2 8%	0 0%	0 8%	0 0%	1 1%	0 0%	3 9%	2 2%	70 6%	
1997	7 7%	0 1%	3 2%	0 2%	1 3%	1 6%	0 0%	0 0%	0 0%	0 0%	0 4%	0 0%	2 9%	0 0%	0 0%	0 0%	0 2%	0 0%	1 2%	0 6%	80 6%	
1998	8 5%	0 1%	0 9%	0 5%	1 3%	0 0%	0 5%	0 0%	0 0%	0 0%	0 1%	0 0%	1 8%	0 0%	0 0%	0 0%	0 0%	0 0%	5 0%	1 0%	80 3%	
1999	10 1%	2 6%	1 8%	0 4%	2 6%	0 6%	5 0%	0 0%	0 0%	0 0%	0 6%	0 0%	8 5%	0 0%	0 5%	0 0%	0 0%	0 0%	1 2%	2 9%	63 3%	
2000	21 5%	1 4%	2 6%	0 4%	2 1%	4 4%	4 5%	0 0%	0 6%	0 0%	0 4%	0 0%	3 1%	0 0%	1 4%	0 0%	0 2%	0 0%	1 0%	2 3%	54 1%	
2001	13 9%	2 8%	1 4%	0 6%	3 5%	12 9%	2 7%	0 0%	0 2%	0 0%	0 0%	0 0%	17 4%	0 0%	3 8%	0 0%	0 6%	0 0%	0 8%	1 7%	37 7%	
2002	21 8%	0 0%	1 4%	12 4%	1 8%	15 3%	1 2%	0 0%	0 1%	0 0%	0 0%	0 0%	8 5%	0 0%	3 5%	0 0%	0 0%	0 0%	1 1%	2 3%	30 5%	
2003	25 9%	0 4%	1 0%	11 1%	1 9%	12 3%	0 3%	0 0%	0 1%	0 0%	0 0%	0 0%	6 5%	0 0%	1 0%	0 0%	0 1%	0 0%	2 9%	5 8%	30 7%	
2004	13 0%	0 3%	1 1%	5 0%	1 4%	12 4%	1 3%	0 0%	0 2%	0 0%	0 0%	0 0%	10 2%	0 0%	1 5%	0 0%	0 2%	0 0%	7 8%	13 9%	31 8%	
2005	8 3%	0 0%	0 7%	5 6%	1 8%	10 4%	0 8%	0 0%	0 0%	0 0%	0 0%	0 0%	5 9%	0 0%	0 5%	0 0%	0 0%	0 0%	7 0%	7 5%	51 4%	
2006	6 2%	0 0%	0 3%	2 0%	0 7%	6 3%	0 7%	0 0%	0 0%	0 0%	0 0%	0 0%	1 7%	0 0%	0 2%	0 1%	0 0%	0 0%	7 5%	5 5%	68 8%	
2007	11 7%	1 0%	1 4%	1 7%	4 4%	7 3%	1 3%	0 0%	0 1%	0 0%	0 0%	0 0%	4 4%	0 0%	0 5%	0 0%	0 1%	0 0%	10 7%	13 1%	42 3%	
1983-2007	12 0%	0 4%	0 8%	3 8%	1 8%	9 0%	1 2%	0 1%	0 5%	0 7%	1 8%	0 0%	5 9%	0 0%	1 2%	0 1%	0 2%	0 0%	5 4%	2 7%	52 4%	
1979-1984	22 1%	0 0%	1 1%	8 1%	0 0%	16 6%	0 0%	1 5%	2 4%	3 2%	6 4%	0 0%	0 8%	0 0%	2 4%	0 0%	0 0%	0 0%	2 4%	0 0%	33 0%	
1985-1995	7 9%	0 1%	0 1%	3 6%	2 1%	10 0%	1 0%	0 0%	0 3%	1 0%	2 6%	0 0%	6 8%	0 0%	0 9%	0 2%	0 2%	0 0%	7 7%	0 4%	55 2%	
1996-1998	9 9%	0 2%	1 4%	0 2%	0 9%	0 5%	0 2%	0 0%	0 7%	0 0%	1 1%	0 0%	2 5%	0 0%	0 3%	0 0%	0 4%	0 0%	3 3%	1 3%	77 1%	
1999-2007	14 7%	0 9%	1 3%	4 4%	2 2%	9 1%	2 0%	0 0%	0 1%	0 0%	0 1%	0 0%	7 4%	0 0%	1 4%	0 0%	0 1%	0 0%	4 4%	6 1%	45 6%	

Appendix C.56. Percent distribution of Columbia River Summers total fishing mortalities among fisheries and escapement.

Appendix C.56. Percent distribution of Columbia River Summers total fishing mortalities among fisheries and escapement.																							
Catch Year	AABM							ISBM															Esc.
	SEAK			NDC		WCVI		Geo St		Canada			WVOR coast			Puget Sound		Tanner					
	Trawl	Net	Sport	Trawl	Sport	Trawl	Sport	Trawl	Sport	Trawl	Net	Sport	Trawl	Net	Sport	Net	Sport	Trawl	Net	Sport			
	14.5%	0.0%	1.0%	9.0%	0.0%	19.0%	0.0%	2.5%	4.5%	4.0%	10.0%	0.0%	0.5%	0.0%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	27.0%		
1979	14.5%	0.0%	1.0%	9.0%	0.0%	19.0%	0.0%	2.5%	4.5%	4.0%	10.0%	0.0%	0.5%	0.0%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	31.3%		
1980	32.8%	0.0%	0.9%	9.2%	0.0%	18.1%	0.0%	0.0%	0.0%	4.3%	1.1%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.7%	25.9%		
1987	16.0%	0.0%	0.0%	8.0%	2.5%	7.4%	0.0%	0.0%	0.0%	3.7%	4.3%	0.0%	19.8%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	13.1%	31.2%		
1988	1.9%	2.2%	0.0%	10.0%	1.9%	20.9%	4.0%	0.0%	0.0%	0.0%	8.7%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.1%	31.2%		
1988	1.9%	2.2%	0.0%	10.0%	1.9%	20.9%	4.0%	0.0%	0.0%	0.0%	8.7%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.1%	31.2%		
1989	7.1%	2.1%	0.7%	5.6%	0.6%	16.4%	2.4%	0.0%	1.4%	0.7%	2.2%	0.0%	14.9%	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	7.5%	35.9%		
1989	7.1%	2.1%	0.7%	5.6%	0.6%	16.4%	2.4%	0.0%	1.4%	0.7%	2.2%	0.0%	14.9%	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	7.5%	35.9%		
1990	10.6%	0.0%	0.0%	7.6%	0.0%	20.3%	0.0%	0.0%	0.6%	1.1%	1.7%	0.0%	5.7%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	10.3%	39.5%		
1990	10.6%	0.0%	0.0%	7.6%	0.0%	20.3%	0.0%	0.0%	0.6%	1.1%	1.7%	0.0%	5.7%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	10.3%	39.5%		
1991	4.1%	0.0%	0.0%	2.3%	0.0%	6.3%	0.7%	0.0%	0.0%	0.5%	2.8%	0.0%	3.6%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	4.0%	73.4%		
1991	4.1%	0.0%	0.0%	2.3%	0.0%	6.3%	0.7%	0.0%	0.0%	0.5%	2.8%	0.0%	3.6%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	4.0%	73.4%		
1992	18.5%	0.0%	0.0%	3.4%	0.0%	15.4%	0.0%	0.0%	0.6%	1.9%	0.9%	0.0%	6.6%	0.0%	0.0%	0.0%	1.6%	0.0%	1.3%	0.0%	49.8%		
1992	18.5%	0.0%	0.0%	3.4%	0.0%	15.4%	0.0%	0.0%	0.6%	1.9%	0.9%	0.0%	6.6%	0.0%	0.0%	0.0%	1.6%	0.0%	1.3%	0.0%	49.8%		
1993	7.8%	0.0%	0.0%	1.4%	0.0%	15.6%	1.8%	0.0%	0.0%	0.0%	2.8%	0.0%	5.5%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	3.2%	60.6%		
1993	7.8%	0.0%	0.0%	1.4%	0.0%	15.6%	1.8%	0.0%	0.0%	0.0%	2.8%	0.0%	5.5%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	3.2%	60.6%		
1994	17.5%	0.0%	0.0%	0.0%	0.0%	15.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%	57.9%		
1994	17.5%	0.0%	0.0%	0.0%	0.0%	15.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%	57.9%		
1995	4.1%	0.0%	0.0%	0.0%	0.0%	7.4%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	2.0%	0.0%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	82.4%		
1995	4.1%	0.0%	0.0%	0.0%	0.0%	7.4%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	2.0%	0.0%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	82.4%		
1996	21.2%	0.7%	0.0%	1.8%	0.2%	2.7%	0.0%	0.0%	2.5%	0.0%	3.2%	0.0%	2.5%	0.0%	0.7%	0.0%	1.1%	0.0%	3.2%	2.1%	58.0%		
1996	21.2%	0.7%	0.0%	1.8%	0.2%	2.7%	0.0%	0.0%	2.5%	0.0%	3.2%	0.0%	2.5%	0.0%	0.7%	0.0%	1.1%	0.0%	3.2%	2.1%	58.0%		
1997	6.9%	0.1%	3.6%	0.2%	1.8%	1.8%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	3.3%	0.0%	0.0%	0.0%	0.2%	0.0%	1.1%	0.7%	77.9%		
1997	6.9%	0.1%	3.6%	0.2%	1.8%	1.8%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	3.3%	0.0%	0.0%	0.0%	0.2%	0.0%	1.1%	0.7%	77.9%		
1998	10.1%	0.5%	1.2%	0.5%	1.7%	0.0%	0.6%	0.0%	0.0%	0.0%	0.1%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.9%	77.4%		
1998	10.1%	0.5%	1.2%	0.5%	1.7%	0.0%	0.6%	0.0%	0.0%	0.0%	0.1%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.9%	77.4%		
1999	13.7%	5.0%	3.0%	0.3%	3.4%	0.5%	5.1%	0.0%	0.0%	0.0%	0.6%	0.0%	9.1%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	1.1%	54.7%		
1999	13.7%	5.0%	3.0%	0.3%	3.4%	0.5%	5.1%	0.0%	0.0%	0.0%	0.6%	0.0%	9.1%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	1.1%	54.7%		
2000	25.6%	2.3%	3.4%	0.4%	2.5%	4.2%	4.6%	0.0%	0.7%	0.0%	0.4%	0.0%	3.3%	0.0%	1.4%	0.1%	0.3%	0.0%	0.9%	2.2%	47.7%		
2000	25.6%	2.3%	3.4%	0.4%	2.5%	4.2%	4.6%	0.0%	0.7%	0.0%	0.4%	0.0%	3.3%	0.0%	1.4%	0.1%	0.3%	0.0%	0.9%	2.2%	47.7%		
2001	16.2%	5.8%	1.4%	0.6%	3.9%	11.7%	2.7%	0.0%	0.2%	0.0%	0.0%	0.0%	17.3%	0.0%	3.7%	0.0%	1.1%	0.0%	0.7%	1.6%	33.2%		
2001	16.2%	5.8%	1.4%	0.6%	3.9%	11.7%	2.7%	0.0%	0.2%	0.0%	0.0%	0.0%	17.3%	0.0%	3.7%	0.0%	1.1%	0.0%	0.7%	1.6%	33.2%		
2002	23.0%	0.0%	1.5%	12.7%	2.2%	15.1%	1.4%	0.0%	0.1%	0.0%	0.0%	0.0%	8.8%	0.0%	3.6%	0.0%	0.0%	0.0%	1.0%	2.3%	28.2%		
2002	23.0%	0.0%	1.5%	12.7%	2.2%	15.1%	1.4%	0.0%	0.1%	0.0%	0.0%	0.0%	8.8%	0.0%	3.6%	0.0%	0.0%	0.0%	1.0%	2.3%	28.2%		
2003	27.4%	1.6%	1.1%	11.7%	2.2%	11.7%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	6.7%	0.0%	1.0%	0.0%	0.1%	0.0%	2.6%	5.6%	27.8%		
2003	27.4%	1.6%	1.1%	11.7%	2.2%	11.7%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	6.7%	0.0%	1.0%	0.0%	0.1%	0.0%	2.6%	5.6%	27.8%		
2004	14.5%	0.6%	1.1%	5.4%	1.9%	12.0%	1.4%	0.0%	0.2%	0.0%	0.0%	0.0%	10.6%	0.0%	1.5%	0.0%	0.3%	0.0%	7.3%	14.0%	29.3%		
2004	14.5%	0.6%	1.1%	5.4%	1.9%	12.0%	1.4%	0.0%	0.2%	0.0%	0.0%	0.0%	10.6%	0.0%	1.5%	0.0%	0.3%	0.0%	7.3%	14.0%	29.3%		
2005	9.1%	0.0%	0.7%	6.0%	2.2%	10.3%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	6.8%	49.3%		
2005	9.1%	0.0%	0.7%	6.0%	2.2%	10.3%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	6.8%	49.3%		
2006	6.9%	0.0%	0.3%	2.1%	0.8%	6.4%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	0.2%	0.1%	0.1%	0.0%	7.4%	5.9%	67.2%		
2006	6.9%	0.0%	0.3%	2.1%	0.8%	6.4%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	0.2%	0.1%	0.1%	0.0%	7.4%	5.9%	67.2%		
2007	12.7%	1.8%	1.4%	1.6%	5.0%	7.0%	1.4%	0.0%	0.1%	0.0%	0.0%	0.0%	4.4%	0.0%	0.5%	0.0%	0.1%	0.0%	10.3%	13.4%	40.3%		
2007	12.7%	1.8%	1.4%	1.6%	5.0%	7.0%	1.4%	0.0%	0.1%	0.0%	0.0%	0.0%	4.4%	0.0%	0.5%	0.0%	0.1%	0.0%	10.3%	13.4%	40.3%		
1983-2007	14.1%	1.0%	0.6%	4.3%	2.1%	10.0%	1.2%	0.1%	0.5%	0.7%	1.8%	0.0%	6.1%	0.0%	1.2%	0.1%	0.2%	0.0%	4.9%	2.7%	48.1%		
1983-2007	14.1%	1.0%	0.6%	4.3%	2.1%	10.0%	1.2%	0.1%	0.5%	0.7%	1.8%	0.0%	6.1%	0.0%	1.2%	0.1%	0.2%	0.0%	4.9%	2.7%	48.1%		
1979-1984	23.6%	0.0%	0.9%	9.1%	0.0%	18.6%	0.0%	1.3%	2.3%	4.2%	5.6%	0.0%	1.1%	0.0%	2.3%	0.0%	0.0%	0.0%	2.0%	0.0%	29.2%		
1979-1984	23.6%	0.0%	0.9%	9.1%	0.0%	18.6%	0.0%	1.3%	2.3%	4.2%	5.6%	0.0%	1.1%	0.0%	2.3%	0.0%	0.0%	0.0%	2.0%	0.0%	29.2%		
1985-1995	9.7%	0.5%	0.1%	4.3%	2.2%	12.2%	1.0%	0.0%	0.3%	0.9%	2.8%	0.0%	6.8%	0.0%	1.0%	0.3%	0.2%	0.0%	6.8%	0.4%	50.7%		
1985-1995	9.7%	0.5%	0.1%	4.3%	2.2%	12.2%	1.0%	0.0%	0.3%	0.9%	2.8%	0.0%	6.8%	0.0%	1.0%	0.3%	0.2%	0.0%	6.8%	0.4%	50.7%		
1996-1998	13.4%	0.4%	1.6%	0.9%	1.2%	1.5%	0.2%	0.0%	0.8%	0.0%	1.2%	0.0%	2.6%	0.0%	0.2%	0.0%	0.5%	0.0%	3.1%	1.2%	71.1%		
1996-1998	13.4%	0.4%	1.6%	0.9%	1.2%	1.5%	0.2%	0.0%	0.8%	0.0%	1.2%	0.0%	2.6%	0.0%	0.2%	0.0%	0.5%	0.0%	3.1%	1.2%	71.1%		
1999-2007	16.6%	1.9%	1.6%	4.5%	2.7%	8.8%	2.1%	0.0%	0.1%	0.0%	0.1%	0.0%	7.6%	0.0%	1.4%	0.0%	0.2%	0.0%	4.2%	6.2%	42.0%		
1999-2007	16.6%	1.9%	1.6%	4.5%	2.7%	8.8%	2.1%	0.0%	0.1%	0.0%	0.1%	0.0%	7.6%	0.0%	1.4%	0.0%	0.2%	0.0%	4.2%	6.2%	42.0%		

Appendix C.57. Percent distribution of Cowlitz Fall Tule reported catch among fisheries and escapement.

Catch Year	AABM							ISBM														Esc.
	SEAK		NBC		WCVI			Geo St		Canada			WVOR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1981	56%	00%	00%	24%	65%	161%	00%	00%	00%	00%	38%	00%	97%	00%	129%	00%	00%	00%	151%	00%	280%	
1982	37%	00%	02%	14%	00%	145%	09%	00%	00%	05%	32%	00%	185%	00%	106%	21%	00%	00%	76%	18%	349%	
1983	37%	00%	00%	67%	00%	178%	00%	00%	04%	37%	11%	00%	69%	00%	176%	04%	00%	00%	44%	11%	362%	
1984	44%	00%	00%	72%	08%	245%	00%	00%	00%	21%	19%	00%	44%	00%	01%	01%	00%	00%	150%	35%	360%	
1985	37%	03%	00%	40%	00%	114%	00%	00%	04%	00%	56%	00%	44%	00%	52%	04%	04%	00%	61%	81%	409%	
1986	04%	01%	00%	02%	00%	126%	00%	00%	04%	06%	19%	00%	130%	00%	53%	02%	04%	00%	307%	68%	274%	
1987	37%	03%	00%	39%	00%	97%	10%	00%	00%	12%	08%	00%	114%	00%	72%	01%	05%	00%	229%	84%	290%	
1988	17%	03%	00%	19%	00%	159%	00%	00%	00%	00%	08%	00%	155%	00%	20%	00%	00%	00%	240%	103%	277%	
1989	33%	00%	07%	45%	00%	66%	00%	00%	00%	00%	14%	00%	178%	00%	31%	00%	03%	00%	71%	71%	481%	
1990	44%	00%	00%	18%	00%	142%	00%	00%	00%	29%	33%	00%	95%	00%	77%	00%	33%	00%	00%	11%	518%	
1991	97%	00%	00%	32%	00%	56%	32%	00%	00%	16%	00%	00%	105%	00%	40%	00%	00%	00%	113%	56%	452%	
1992	22%	00%	00%	00%	16%	177%	00%	00%	00%	22%	00%	00%	70%	22%	48%	00%	00%	00%	32%	00%	591%	
1993	34%	00%	00%	25%	00%	67%	00%	00%	00%	00%	09%	00%	175%	00%	74%	00%	00%	00%	31%	150%	436%	
1994	42%	00%	00%	19%	00%	19%	00%	00%	00%	00%	00%	00%	33%	00%	00%	00%	00%	00%	00%	00%	887%	
1995	06%	00%	00%	18%	00%	18%	24%	00%	00%	00%	12%	00%	47%	00%	00%	12%	00%	00%	12%	18%	834%	
1996	41%	00%	00%	00%	00%	00%	00%	00%	22%	00%	00%	00%	59%	00%	00%	00%	00%	00%	11%	37%	830%	
1997	49%	00%	98%	30%	00%	49%	00%	00%	24%	00%	00%	00%	55%	00%	00%	00%	00%	00%	00%	12%	683%	
1998	37%	00%	00%	74%	00%	00%	00%	00%	00%	00%	00%	00%	99%	00%	25%	00%	00%	00%	00%	00%	765%	
1999	44%	00%	37%	00%	44%	37%	00%	00%	00%	00%	00%	00%	88%	00%	29%	00%	00%	00%	00%	147%	574%	
2000	31%	00%	00%	00%	00%	73%	115%	00%	00%	00%	00%	00%	135%	00%	21%	00%	00%	00%	52%	52%	521%	
2001	09%	00%	00%	00%	00%	13%	33%	00%	00%	00%	00%	00%	105%	00%	94%	00%	00%	00%	15%	24%	706%	
2002	62%	00%	00%	09%	00%	78%	32%	00%	00%	00%	00%	00%	257%	00%	214%	00%	00%	00%	34%	38%	276%	
2003	50%	00%	00%	13%	00%	100%	19%	00%	13%	00%	00%	00%	171%	00%	66%	00%	00%	00%	89%	52%	426%	
2004	43%	00%	00%	10%	00%	63%	00%	00%	00%	00%	00%	00%	178%	00%	91%	00%	19%	00%	91%	24%	481%	
2005	26%	74%	00%	26%	00%	48%	30%	00%	00%	00%	00%	00%	78%	00%	52%	00%	00%	00%	35%	39%	593%	
2006	59%	00%	00%	29%	00%	44%	00%	00%	00%	00%	00%	00%	66%	00%	15%	00%	00%	00%	22%	110%	654%	
2007	23%	15%	00%	61%	00%	106%	38%	00%	00%	00%	00%	00%	121%	00%	38%	00%	00%	00%	00%	00%	598%	
1983-2007	38%	04%	05%	25%	05%	88%	13%	00%	03%	06%	10%	00%	109%	01%	56%	02%	03%	00%	69%	46%	518%	
1979-1984	44%	00%	01%	44%	18%	182%	02%	00%	01%	16%	25%	00%	99%	00%	103%	06%	00%	00%	105%	16%	338%	
1985-1995	34%	01%	01%	23%	01%	95%	06%	00%	01%	08%	14%	00%	104%	02%	42%	02%	05%	00%	100%	58%	503%	
1996-1998	42%	00%	33%	35%	00%	16%	00%	00%	16%	00%	00%	00%	71%	00%	08%	00%	00%	00%	04%	16%	759%	
1999-2007	39%	10%	04%	17%	05%	62%	30%	00%	01%	00%	00%	00%	133%	00%	69%	00%	02%	00%	38%	54%	537%	



**Appendix C.58. Percent distribution of Cowlitz Fall Tule total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo Sl		Canada			WAVR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1981	6.0%	0.0%	0.0%	2.4%	6.3%	18.8%	0.0%	0.0%	0.0%	3.4%	0.0%	0.0%	11.3%	0.0%	12.7%	0.5%	0.0%	0.0%	13.7%	0.0%	25.0%
1982	4.3%	0.0%	0.4%	1.6%	0.0%	16.8%	1.0%	0.0%	0.0%	0.4%	3.4%	0.0%	20.2%	0.0%	10.9%	2.8%	0.0%	0.0%	6.7%	1.8%	29.8%
1983	4.4%	0.0%	0.0%	7.2%	0.0%	18.9%	0.0%	0.0%	0.3%	3.9%	1.0%	0.0%	7.8%	0.0%	17.7%	0.5%	0.0%	0.0%	4.2%	1.0%	33.2%
1984	4.5%	0.0%	0.0%	7.5%	0.9%	25.6%	0.0%	0.0%	0.0%	2.3%	1.9%	0.0%	4.7%	0.0%	9.1%	0.1%	0.0%	0.0%	14.6%	3.6%	34.2%
1985	4.0%	1.1%	0.0%	4.4%	0.0%	12.6%	0.0%	0.0%	0.4%	0.0%	5.6%	0.0%	5.1%	0.0%	5.6%	0.5%	0.7%	0.0%	5.8%	8.6%	45.4%
1986	0.5%	0.2%	0.0%	0.2%	0.0%	14.0%	0.0%	0.0%	0.3%	0.7%	1.8%	0.0%	14.6%	0.0%	5.5%	0.3%	0.5%	0.0%	29.8%	6.7%	24.9%
1987	6.0%	0.7%	0.0%	4.6%	0.0%	11.2%	0.9%	0.0%	0.0%	1.4%	0.7%	0.0%	12.1%	0.0%	7.0%	0.1%	0.5%	0.0%	21.1%	7.9%	25.6%
1988	1.8%	0.8%	0.0%	2.1%	0.0%	17.8%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	16.0%	0.0%	2.0%	0.0%	0.0%	0.0%	22.7%	10.5%	25.7%
1989	4.6%	0.0%	0.7%	4.7%	0.0%	7.2%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	18.7%	0.0%	3.3%	0.0%	0.3%	0.0%	6.8%	7.3%	45.2%
1990	4.4%	0.0%	0.0%	2.4%	0.0%	15.5%	0.0%	0.0%	0.0%	3.4%	3.7%	0.0%	10.1%	0.0%	7.7%	0.0%	4.0%	0.0%	0.0%	1.0%	47.8%
1991	12.4%	0.0%	0.0%	3.6%	0.0%	6.6%	2.9%	0.0%	0.0%	1.5%	0.0%	0.0%	11.7%	0.0%	3.6%	0.0%	0.0%	0.0%	10.9%	5.8%	40.9%
1992	2.5%	0.0%	0.0%	0.0%	2.0%	20.2%	0.0%	0.0%	0.0%	2.5%	0.0%	0.0%	7.9%	2.5%	5.4%	0.0%	0.0%	0.0%	3.0%	0.0%	54.2%
1993	4.3%	0.0%	0.0%	3.0%	0.0%	7.6%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	18.7%	0.0%	7.3%	0.0%	0.0%	0.0%	3.0%	16.5%	38.5%
1994	5.1%	0.0%	0.0%	2.3%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	87.1%
1995	1.2%	0.0%	0.0%	2.9%	0.0%	2.3%	2.3%	0.0%	0.0%	0.0%	1.2%	0.0%	4.6%	0.0%	0.0%	1.2%	0.0%	0.0%	1.2%	1.7%	81.5%
1996	5.4%	0.0%	0.0%	0.4%	0.0%	0.7%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	6.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	3.9%	80.0%
1997	5.7%	0.0%	10.9%	3.4%	0.0%	5.7%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	64.4%
1998	4.8%	0.0%	0.0%	8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.7%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	73.8%
1999	6.7%	0.0%	4.0%	0.0%	5.4%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	15.4%	52.3%
2000	3.8%	0.0%	0.0%	0.0%	0.0%	7.5%	12.3%	0.0%	0.0%	0.0%	0.0%	0.0%	17.0%	0.0%	1.9%	0.0%	0.0%	0.0%	4.7%	5.7%	47.2%
2001	1.0%	0.0%	0.0%	0.0%	0.0%	1.3%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	12.1%	0.0%	10.2%	0.0%	0.0%	0.0%	1.5%	2.9%	67.2%
2002	7.1%	0.0%	0.0%	1.0%	0.0%	7.2%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	27.4%	0.0%	21.4%	0.0%	0.0%	0.0%	3.3%	4.1%	25.2%
2003	5.3%	0.0%	0.0%	1.5%	0.0%	10.2%	2.2%	0.0%	1.5%	0.0%	0.0%	0.0%	18.2%	0.0%	6.9%	0.0%	0.0%	0.0%	8.6%	5.5%	40.3%
2004	5.4%	0.0%	0.0%	0.9%	0.0%	5.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.3%	0.0%	9.4%	0.0%	2.7%	0.0%	9.0%	2.7%	44.8%
2005	2.9%	8.7%	0.0%	2.9%	0.0%	4.5%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%	0.0%	5.4%	0.0%	0.0%	0.0%	3.3%	4.1%	56.6%
2006	5.7%	0.0%	0.0%	2.8%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.1%	0.0%	2.1%	0.0%	0.0%	0.0%	2.1%	12.1%	63.1%
2007	3.2%	4.5%	0.0%	5.8%	0.0%	9.7%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	16.9%	0.0%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	51.3%
1983-2007	4.6%	0.6%	0.6%	2.8%	0.5%	9.6%	1.3%	0.0%	0.3%	0.6%	1.0%	0.0%	12.0%	0.1%	5.8%	0.2%	0.3%	0.0%	6.6%	4.8%	48.3%
1979-1984	4.8%	0.0%	0.1%	4.7%	1.8%	20.0%	0.2%	0.0%	0.1%	1.6%	2.4%	0.0%	11.0%	0.0%	10.4%	1.0%	0.0%	0.0%	9.8%	1.6%	30.6%
1985-1995	4.2%	0.3%	0.1%	2.7%	0.2%	10.7%	0.6%	0.0%	0.1%	0.9%	1.5%	0.0%	11.2%	0.2%	4.3%	0.2%	0.6%	0.0%	9.5%	6.0%	47.0%
1996-1998	5.3%	0.0%	3.6%	4.0%	0.0%	2.2%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	7.5%	0.0%	0.8%	0.0%	0.0%	0.0%	0.4%	1.7%	72.7%
1999-2007	4.6%	1.5%	0.4%	1.7%	0.6%	6.1%	3.2%	0.0%	0.2%	0.0%	0.0%	0.0%	15.1%	0.0%	7.2%	0.0%	0.3%	0.0%	3.6%	5.8%	49.8%



**Appendix C.59. Percent distribution of Spring Creek Tule reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1979	0.0%	0.0%	0.0%	0.1%	0.0%	23.6%	0.1%	0.2%	1.2%	0.7%	2.7%	0.0%	16.6%	0.6%	7.5%	1.4%	5.3%	0.0%	21.6%	0.0%	18.4%
1980	0.1%	0.0%	0.0%	0.1%	0.0%	26.0%	0.1%	0.1%	2.7%	0.5%	1.1%	0.0%	23.4%	1.9%	5.1%	0.7%	4.9%	0.0%	21.0%	0.0%	12.5%
1981	0.0%	0.0%	0.0%	0.1%	0.0%	21.0%	0.1%	0.1%	1.4%	0.2%	2.0%	0.0%	23.5%	0.3%	10.7%	0.5%	1.9%	0.0%	19.9%	0.0%	16.3%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	22.0%	0.0%	0.0%	1.0%	0.5%	0.3%	0.0%	19.6%	0.1%	7.2%	1.1%	1.0%	0.0%	34.5%	0.0%	12.7%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	29.9%	0.5%	0.0%	1.1%	0.4%	0.0%	0.0%	8.4%	0.0%	4.0%	0.3%	5.7%	0.0%	19.9%	0.0%	29.8%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	27.4%	0.4%	0.0%	0.0%	2.4%	1.3%	0.0%	6.0%	0.0%	1.0%	0.7%	3.8%	0.0%	25.2%	2.6%	29.1%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	13.5%	0.7%	0.0%	0.0%	0.2%	0.2%	0.0%	13.9%	0.0%	2.4%	0.7%	1.4%	0.0%	26.7%	0.3%	40.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	23.1%	2.5%	0.0%	1.8%	2.8%	1.5%	0.0%	2.5%	0.0%	2.5%	0.9%	4.0%	0.0%	34.2%	1.2%	23.1%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	7.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.0%	0.0%	8.8%	17.5%	2.6%	0.0%	21.1%	8.8%	19.3%
1988	0.0%	0.0%	0.0%	0.5%	0.0%	23.2%	2.2%	0.0%	0.9%	0.3%	2.0%	0.0%	18.3%	0.0%	3.3%	1.6%	2.7%	0.0%	29.4%	4.4%	11.3%
1989	0.0%	0.0%	0.0%	0.2%	0.0%	14.4%	3.3%	0.0%	0.4%	0.0%	0.4%	0.0%	24.8%	0.0%	3.3%	0.1%	1.6%	0.0%	34.4%	3.3%	13.8%
1990	0.0%	0.0%	0.0%	0.2%	0.0%	17.6%	4.5%	0.3%	0.4%	0.3%	1.0%	0.0%	14.3%	0.0%	7.0%	0.3%	3.9%	0.0%	22.7%	2.2%	25.3%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	13.1%	1.3%	0.0%	0.2%	0.3%	0.5%	0.0%	16.9%	0.0%	4.7%	0.5%	2.4%	0.0%	33.8%	3.9%	22.5%
1992	0.0%	0.0%	0.0%	0.0%	0.0%	11.9%	2.5%	0.2%	0.4%	0.3%	0.5%	0.0%	26.5%	0.0%	5.2%	0.0%	3.1%	0.0%	14.7%	3.5%	31.3%
1993	0.0%	0.0%	0.0%	0.0%	0.0%	17.7%	4.2%	0.0%	0.0%	0.0%	0.4%	0.0%	17.7%	0.2%	2.9%	0.0%	4.3%	0.0%	21.2%	3.2%	28.3%
1994	0.0%	0.0%	0.0%	0.0%	0.0%	18.6%	3.9%	0.0%	0.0%	0.0%	0.8%	0.0%	3.5%	0.0%	0.0%	0.0%	0.8%	0.0%	28.9%	0.0%	43.4%
1995	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	2.7%	0.0%	0.0%	0.0%	0.2%	0.0%	1.8%	0.0%	0.0%	0.3%	0.0%	0.0%	37.6%	0.0%	50.7%
1996	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	6.1%	0.0%	1.1%	0.0%	0.7%	0.0%	57.8%	1.5%	29.7%
1997	0.0%	0.0%	0.0%	0.0%	0.0%	11.9%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	5.4%	0.0%	1.3%	0.0%	2.9%	0.0%	24.3%	7.6%	44.0%
1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	1.7%	0.0%	0.3%	0.0%	15.0%	10.9%	68.5%
1999	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	3.8%	0.0%	0.3%	0.0%	0.0%	0.0%	16.9%	0.0%	2.6%	0.0%	0.2%	0.0%	36.5%	6.4%	33.0%
2000	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%	4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	5.5%	0.0%	1.9%	0.0%	0.4%	0.0%	22.3%	7.2%	54.0%
2001	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	0.8%	0.0%	0.2%	0.0%	0.0%	0.0%	13.9%	0.0%	2.9%	0.0%	0.3%	0.0%	22.5%	2.1%	54.0%
2002	0.0%	0.0%	0.0%	0.0%	0.0%	11.0%	1.3%	0.0%	0.2%	0.0%	0.0%	0.0%	16.3%	0.0%	7.8%	0.0%	0.3%	0.0%	25.2%	2.5%	35.3%
2003	0.0%	0.0%	0.0%	0.0%	0.0%	10.2%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	10.5%	0.0%	3.5%	0.0%	0.1%	0.0%	22.1%	2.2%	48.9%
2004	0.0%	0.0%	0.0%	0.0%	0.0%	11.8%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	8.4%	0.0%	3.1%	0.0%	0.4%	0.0%	16.7%	1.7%	55.2%
2005	0.0%	0.0%	0.0%	0.0%	0.0%	20.2%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	6.4%	0.0%	1.2%	0.0%	0.0%	0.0%	28.1%	0.9%	40.7%
2006	0.0%	0.0%	0.0%	0.3%	0.0%	19.2%	4.6%	0.0%	0.0%	0.0%	0.0%	0.0%	5.2%	0.4%	2.1%	0.0%	1.2%	0.0%	34.0%	0.4%	32.5%
2007	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	1.8%	0.0%	0.3%	0.0%	0.0%	0.0%	2.5%	0.0%	3.6%	0.0%	0.7%	0.0%	27.8%	1.1%	57.7%
1983-2007	0.0%	0.0%	0.0%	0.0%	0.0%	14.3%	2.1%	0.0%	0.4%	0.3%	0.5%	0.0%	12.1%	0.1%	3.7%	0.9%	2.0%	0.0%	26.9%	2.7%	33.9%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.2%	0.1%	1.2%	0.8%	1.2%	0.0%	16.3%	0.5%	5.9%	0.8%	3.8%	0.0%	23.7%	0.4%	20.1%
1985-1995	0.0%	0.0%	0.0%	0.1%	0.0%	15.3%	2.5%	0.0%	0.4%	0.4%	0.7%	0.0%	14.0%	0.0%	3.6%	2.0%	2.4%	0.0%	27.7%	2.8%	28.1%
1996-1998	0.0%	0.0%	0.0%	0.0%	0.0%	4.1%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	4.8%	0.0%	1.4%	0.0%	1.3%	0.0%	32.4%	6.6%	47.4%
1999-2007	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%	2.8%	0.0%	0.1%	0.0%	0.0%	0.0%	9.5%	0.0%	3.2%	0.0%	0.4%	0.0%	26.1%	2.7%	45.7%

Appendix C.60. Percent distribution of Spring Creek Tule total fishing mortalities among fisheries and escapement.

Catch Year	AABM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1979	0 0%	0 0%	0 0%	0 1%	0 0%	26 9%	0 1%	0 2%	1 1%	0 8%	2 5%	0 0%	18 1%	0 7%	7 3%	1 8%	6 1%	0 0%	19 2%	0 0%	15 3%
1980	0 1%	0 0%	0 0%	0 1%	0 0%	28 5%	0 1%	0 1%	2 4%	0 6%	1 0%	0 0%	24 5%	2 2%	4 9%	0 8%	5 7%	0 0%	18 6%	0 0%	10 5%
1981	0 0%	0 0%	0 0%	0 1%	0 0%	22 9%	0 1%	0 1%	1 3%	0 2%	1 9%	0 0%	24 7%	0 3%	10 7%	0 5%	2 2%	0 0%	18 8%	0 0%	16 1%
1982	0 0%	0 0%	0 0%	0 0%	0 0%	25 0%	0 0%	0 0%	1 0%	0 5%	0 2%	0 0%	21 4%	0 1%	6 9%	1 1%	1 0%	0 0%	31 7%	0 0%	11 1%
1983	0 0%	0 0%	0 0%	0 0%	0 0%	31 5%	0 5%	0 0%	1 1%	0 5%	0 0%	0 0%	9 1%	0 0%	4 1%	0 3%	7 9%	0 0%	18 6%	0 0%	26 4%
1984	0 0%	0 0%	0 0%	0 0%	0 0%	27 2%	0 3%	0 0%	0 0%	2 4%	1 2%	0 0%	6 1%	0 0%	1 0%	1 0%	9 1%	0 0%	23 6%	2 5%	25 5%
1985	0 0%	0 0%	0 0%	0 0%	0 0%	14 6%	0 6%	0 0%	0 0%	0 2%	0 2%	0 0%	16 1%	0 0%	2 5%	0 7%	1 4%	0 0%	26 5%	0 2%	36 9%
1986	0 0%	0 0%	0 0%	0 0%	0 0%	24 3%	2 6%	0 0%	1 7%	2 9%	1 7%	0 0%	2 6%	0 0%	2 6%	1 1%	4 9%	0 0%	33 1%	1 1%	21 4%
1987	0 0%	0 0%	0 0%	0 0%	0 0%	9 9%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	15 2%	0 0%	7 9%	23 2%	4 6%	0 0%	17 2%	7 3%	14 6%
1988	0 0%	0 0%	0 0%	0 5%	0 0%	26 8%	2 2%	0 0%	1 0%	0 2%	1 7%	0 0%	18 8%	0 0%	3 1%	2 1%	4 9%	0 0%	25 2%	4 6%	8 9%
1989	0 0%	0 0%	0 0%	0 2%	0 0%	16 5%	3 2%	0 0%	0 5%	0 0%	0 4%	0 0%	26 7%	0 0%	3 2%	0 2%	1 9%	0 0%	31 7%	3 7%	11 8%
1990	0 0%	0 0%	0 0%	0 2%	0 0%	19 9%	4 5%	0 3%	0 4%	0 4%	0 9%	0 0%	15 5%	0 0%	7 1%	0 4%	5 5%	0 0%	20 7%	2 3%	21 7%
1991	0 0%	0 0%	0 0%	0 0%	0 0%	15 2%	1 3%	0 0%	0 3%	0 3%	0 5%	0 0%	18 6%	0 0%	4 8%	0 6%	3 2%	0 0%	31 4%	4 2%	19 6%
1992	0 0%	0 0%	0 0%	0 0%	0 0%	14 0%	2 4%	0 2%	0 5%	0 3%	0 5%	0 0%	28 7%	0 0%	5 0%	0 0%	3 3%	0 0%	13 8%	3 9%	27 5%
1993	0 0%	0 0%	0 0%	0 0%	0 0%	19 7%	4 2%	0 0%	0 0%	0 0%	0 3%	0 0%	19 3%	0 2%	2 9%	0 0%	5 5%	0 0%	19 6%	3 3%	25 0%
1994	0 0%	0 0%	0 0%	0 0%	0 0%	22 0%	4 0%	0 0%	0 0%	0 0%	0 9%	0 0%	3 5%	0 0%	0 0%	0 0%	1 1%	0 0%	28 6%	0 0%	39 9%
1995	0 0%	0 0%	0 0%	0 0%	0 0%	10 1%	2 8%	0 0%	0 0%	0 0%	0 4%	0 0%	1 8%	0 0%	0 0%	0 5%	0 0%	0 0%	37 3%	0 0%	47 1%
1996	0 0%	0 0%	0 0%	0 0%	0 0%	1 4%	3 2%	0 0%	0 0%	0 0%	0 0%	0 0%	6 0%	0 0%	1 1%	0 0%	0 9%	0 0%	57 9%	1 8%	27 7%
1997	0 0%	0 0%	0 0%	0 0%	0 0%	14 7%	2 6%	0 0%	0 0%	0 0%	0 0%	0 0%	5 8%	0 0%	1 2%	0 0%	3 7%	0 0%	23 5%	8 3%	40 2%
1998	0 0%	0 0%	0 0%	0 0%	0 0%	0 2%	0 6%	0 0%	0 0%	0 0%	0 0%	0 0%	3 3%	0 0%	1 9%	0 0%	1 3%	0 0%	15 3%	13 6%	63 7%
1999	0 0%	0 0%	0 0%	0 0%	0 0%	0 3%	3 8%	0 0%	0 3%	0 0%	0 0%	0 0%	19 2%	0 0%	2 6%	0 0%	0 3%	0 0%	35 8%	7 7%	29 9%
2000	0 0%	0 0%	0 0%	0 0%	0 0%	4 1%	5 7%	0 0%	0 0%	0 0%	0 0%	0 0%	6 4%	0 0%	2 2%	0 0%	2 1%	0 0%	22 0%	8 5%	49 0%
2001	0 0%	0 0%	0 0%	0 0%	0 0%	3 4%	0 8%	0 0%	0 3%	0 0%	0 0%	0 0%	16 1%	0 0%	3 1%	0 0%	1 2%	0 0%	22 5%	2 6%	50 0%
2002	0 0%	0 0%	0 0%	0 0%	0 0%	11 0%	1 4%	0 0%	0 3%	0 0%	0 0%	0 0%	18 8%	0 0%	8 2%	0 0%	0 6%	0 0%	24 6%	2 9%	32 2%
2003	0 0%	0 0%	0 0%	0 0%	0 0%	10 4%	3 0%	0 0%	0 0%	0 0%	0 0%	0 0%	11 8%	0 0%	3 7%	0 0%	0 2%	0 0%	22 1%	2 5%	46 3%
2004	0 0%	0 0%	0 0%	0 0%	0 0%	11 8%	3 0%	0 0%	0 0%	0 0%	0 0%	0 0%	9 9%	0 0%	3 3%	0 0%	0 5%	0 0%	16 9%	2 0%	52 7%
2005	0 0%	0 0%	0 0%	0 0%	0 0%	20 4%	2 8%	0 0%	0 0%	0 0%	0 0%	0 0%	7 0%	0 0%	1 3%	0 0%	0 0%	0 0%	28 2%	1 0%	39 2%
2006	0 0%	0 0%	0 0%	0 4%	0 0%	19 8%	5 1%	0 0%	0 0%	0 0%	0 0%	0 0%	6 2%	0 4%	2 2%	0 0%	1 7%	0 0%	33 4%	0 6%	30 1%
2007	0 0%	0 0%	0 0%	0 0%	0 0%	5 1%	2 0%	0 0%	0 5%	0 0%	0 0%	0 0%	2 9%	0 0%	4 0%	0 0%	7 0%	0 0%	26 7%	1 3%	50 5%
1983-2007	0 0%	0 0%	0 0%	0 1%	0 0%	15 8%	2 2%	0 0%	0 4%	0 3%	0 5%	0 0%	13 3%	0 1%	3 8%	1 2%	3 0%	0 0%	25 7%	3 0%	30 7%
1979-1984	0 0%	0 0%	0 0%	0 0%	0 0%	27 0%	0 2%	0 1%	1 1%	0 8%	1 1%	0 0%	17 3%	0 5%	5 8%	0 9%	5 3%	0 0%	21 8%	0 4%	17 5%
1985-1995	0 0%	0 0%	0 0%	0 1%	0 0%	17 6%	2 5%	0 0%	0 4%	0 4%	0 7%	0 0%	15 2%	0 0%	3 5%	2 6%	3 3%	0 0%	25 9%	2 8%	24 9%
1996-1998	0 0%	0 0%	0 0%	0 0%	0 0%	5 4%	2 1%	0 0%	0 0%	0 0%	0 0%	0 0%	5 1%	0 0%	1 4%	0 0%	2 0%	0 0%	32 2%	7 9%	43 9%
1999-2007	0 0%	0 0%	0 0%	0 0%	0 0%	9 6%	3 1%	0 0%	0 1%	0 0%	0 0%	0 0%	10 9%	0 0%	3 4%	0 0%	1 5%	0 0%	25 8%	3 2%	42 2%

**Appendix C.61. Percent distribution of Lower River Hatchery reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1980	08%	00%	00%	00%	00%	16.8%	1.3%	00%	3.3%	05%	7.7%	00%	18.1%	1.0%	12.0%	3.1%	10.2%	00%	5.6%	0.0%	19.6%
1981	00%	00%	00%	00%	00%	30.6%	0.3%	00%	1.8%	05%	2.5%	00%	22.6%	0.0%	8.0%	0.5%	3.3%	00%	1.3%	0.2%	28.2%
1982	00%	00%	00%	03%	00%	26.0%	0.5%	00%	0.8%	1.8%	0.3%	00%	18.6%	0.2%	7.6%	1.9%	1.3%	00%	14.2%	0.1%	26.5%
1983	00%	00%	00%	00%	0.1%	34.6%	0.4%	00%	1.4%	2.3%	0.8%	00%	11.3%	0.0%	4.4%	1.3%	4.2%	00%	5.5%	0.0%	33.6%
1984	00%	00%	00%	00%	00%	50.3%	0.3%	05%	0.8%	3.2%	1.6%	00%	5.9%	0.0%	1.2%	0.7%	1.0%	00%	10.5%	1.5%	22.5%
1985	00%	00%	00%	00%	00%	28.0%	0.7%	00%	1.1%	0.9%	1.6%	00%	15.7%	0.3%	3.9%	1.3%	1.3%	00%	2.5%	0.6%	42.1%
1986	00%	00%	00%	00%	0.1%	9.3%	2.7%	00%	2.5%	0.0%	8.1%	00%	6.9%	0.0%	2.2%	1.4%	3.4%	00%	9.8%	5.9%	47.8%
1987	00%	00%	00%	0.2%	0.0%	26.9%	2.5%	00%	0.5%	1.6%	0.2%	00%	16.6%	0.5%	4.0%	0.7%	1.5%	00%	19.4%	4.0%	21.3%
1988	03%	00%	00%	03%	0.0%	28.8%	2.4%	00%	1.0%	0.6%	0.0%	00%	11.5%	0.5%	0.9%	0.3%	0.5%	00%	23.5%	1.8%	27.6%
1989	00%	00%	00%	00%	0.0%	15.4%	0.0%	00%	0.0%	0.0%	2.0%	0.0%	22.4%	0.0%	2.4%	0.0%	2.0%	0.0%	5.9%	0.8%	49.2%
1990	00%	00%	00%	00%	0.0%	19.8%	0.0%	00%	0.0%	0.0%	2.1%	0.0%	16.3%	0.0%	6.9%	0.0%	1.4%	0.0%	0.3%	2.8%	50.3%
1991	00%	00%	00%	00%	0.0%	10.2%	2.0%	00%	0.7%	0.2%	2.5%	0.0%	9.3%	0.0%	4.3%	0.2%	1.1%	0.0%	2.0%	9.5%	57.9%
1992	00%	00%	00%	00%	0.0%	16.3%	1.9%	00%	0.0%	0.5%	1.0%	0.0%	28.0%	0.0%	5.4%	0.0%	1.9%	0.0%	0.8%	3.7%	40.5%
1993	00%	00%	00%	00%	0.0%	18.5%	4.5%	00%	0.0%	0.6%	0.0%	0.0%	19.7%	0.0%	2.5%	0.0%	4.1%	0.0%	2.1%	4.3%	43.7%
1994	00%	00%	00%	00%	0.0%	27.6%	0.0%	00%	10.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	62.1%
1995	00%	00%	00%	00%	0.0%	0.0%	0.0%	00%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	10.0%	86.7%
1996	00%	00%	00%	00%	0.0%	0.0%	0.0%	00%	0.0%	0.0%	0.0%	0.0%	8.1%	0.0%	0.0%	0.0%	0.0%	0.0%	6.5%	0.0%	85.5%
1997	00%	00%	00%	00%	0.0%	16.4%	3.9%	00%	2.9%	0.0%	0.0%	0.0%	8.7%	0.0%	3.4%	0.0%	0.0%	0.0%	1.0%	8.2%	55.6%
1998	00%	00%	00%	00%	4.0%	1.0%	5.1%	00%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	1.0%	0.0%	0.0%	0.0%	2.0%	22.2%	63.6%
1999	00%	00%	00%	00%	0.0%	2.3%	9.1%	00%	0.0%	0.0%	0.0%	0.0%	6.8%	0.0%	3.3%	0.0%	0.0%	0.0%	3.6%	6.2%	68.7%
2000	00%	00%	00%	00%	0.0%	17.0%	11.5%	00%	1.8%	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	0.0%	0.9%	0.0%	2.8%	3.7%	60.1%
2001	00%	00%	00%	00%	0.0%	8.8%	2.4%	00%	0.3%	0.0%	0.0%	0.0%	19.3%	0.0%	3.6%	0.1%	0.3%	0.0%	1.4%	4.8%	59.1%
2002	0.4%	0.0%	0.0%	0.0%	0.0%	10.6%	3.1%	00%	0.0%	0.0%	0.0%	0.0%	20.6%	0.0%	7.8%	0.1%	0.0%	0.0%	8.5%	3.1%	45.8%
2003	0.0%	0.0%	0.0%	0.0%	0.0%	16.2%	5.7%	00%	0.4%	0.0%	0.0%	0.0%	15.2%	0.0%	7.0%	0.0%	0.7%	0.0%	7.2%	2.3%	45.3%
2004	0.5%	0.0%	0.0%	0.3%	0.8%	22.6%	8.5%	00%	0.5%	0.0%	0.0%	0.0%	8.4%	0.0%	3.7%	0.0%	0.1%	0.0%	17.4%	1.2%	36.1%
2005	0.0%	0.0%	0.0%	0.3%	0.0%	30.0%	6.8%	00%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%	2.2%	0.0%	0.0%	0.0%	21.7%	0.2%	32.1%
2006	0.0%	0.0%	0.0%	0.0%	0.0%	16.9%	14.5%	00%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	10.8%	1.2%	54.2%
2007	0.0%	0.7%	0.0%	0.0%	0.0%	14.2%	0.0%	00%	0.0%	0.0%	0.0%	0.0%	5.7%	0.0%	2.1%	0.0%	0.0%	0.0%	5.0%	2.8%	69.5%
1983-2007	0.1%	0.0%	0.0%	0.0%	0.2%	18.4%	3.2%	0.0%	1.1%	0.5%	1.1%	0.0%	11.7%	0.1%	3.6%	0.4%	1.4%	0.0%	7.0%	3.6%	47.7%
1979-1984	0.2%	0.0%	0.0%	0.1%	0.0%	31.7%	0.6%	0.1%	1.6%	1.7%	2.6%	0.0%	15.3%	0.2%	6.6%	1.5%	4.0%	0.0%	7.5%	0.4%	26.1%
1985-1995	0.0%	0.0%	0.0%	0.0%	0.0%	18.3%	1.5%	0.0%	1.5%	0.4%	1.6%	0.0%	13.3%	0.1%	2.9%	0.4%	1.6%	0.0%	6.3%	3.9%	48.1%
1996-1998	0.0%	0.0%	0.0%	0.0%	1.3%	5.8%	3.0%	0.0%	1.0%	0.0%	0.0%	0.0%	5.9%	0.0%	1.5%	0.0%	0.0%	0.0%	3.1%	10.1%	68.2%
1999-2007	0.1%	0.1%	0.0%	0.1%	0.1%	15.4%	6.8%	0.0%	0.3%	0.0%	0.0%	0.0%	9.7%	0.0%	3.3%	0.0%	0.2%	0.0%	8.7%	2.8%	52.3%

Appendix C.62. Percent distribution of Lower River Hatchery total fishing mortalities among fisheries and escapement.

Catch Year	AABM							ISBM												Esc.	
	SEAK		NBC		WCVI			Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net		Sport
1980	0.4%	0.0%	0.0%	0.1%	0.0%	32.8%	0.7%	0.0%	2.0%	0.8%	5.1%	0.0%	23.0%	0.7%	8.5%	2.7%	9.2%	0.0%	3.2%	0.0%	10.8%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	33.4%	0.3%	0.0%	1.6%	0.5%	2.2%	0.0%	25.0%	0.0%	7.7%	0.6%	3.6%	0.0%	1.2%	0.2%	23.6%
1982	0.0%	0.0%	0.0%	0.3%	0.0%	29.2%	0.5%	0.0%	0.8%	2.0%	0.3%	0.0%	20.0%	0.2%	7.4%	2.1%	1.4%	0.0%	12.9%	0.1%	22.9%
1983	0.0%	0.0%	0.0%	0.0%	0.1%	36.5%	0.4%	0.0%	1.3%	2.5%	0.8%	0.0%	12.4%	0.0%	4.4%	1.6%	5.3%	0.0%	5.2%	0.0%	29.6%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	52.0%	0.2%	0.5%	0.8%	3.4%	1.5%	0.0%	6.3%	0.0%	1.2%	0.9%	1.4%	0.0%	10.1%	1.5%	20.2%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	30.1%	0.7%	0.0%	1.1%	0.9%	1.5%	0.0%	17.7%	0.3%	3.9%	1.4%	1.5%	0.0%	2.4%	0.5%	37.9%
1986	0.0%	0.0%	0.0%	0.0%	0.2%	8.8%	2.5%	0.0%	1.9%	0.0%	6.9%	0.0%	6.3%	0.0%	1.9%	1.9%	21.6%	0.0%	7.6%	6.4%	34.1%
1987	0.0%	0.0%	0.0%	0.2%	0.0%	33.0%	2.2%	0.0%	0.4%	1.9%	0.2%	0.0%	17.3%	0.5%	3.6%	0.6%	1.4%	0.0%	17.4%	3.5%	17.6%
1988	0.3%	0.0%	0.0%	0.3%	0.0%	31.8%	2.4%	0.0%	1.0%	0.6%	0.0%	0.0%	11.7%	0.5%	0.9%	0.3%	0.5%	0.0%	22.3%	1.8%	25.8%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	17.0%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	25.3%	0.0%	2.2%	0.0%	2.5%	0.0%	5.4%	0.7%	45.1%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	22.8%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	18.2%	0.0%	7.1%	0.0%	1.9%	0.0%	0.3%	3.1%	44.8%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	12.3%	2.2%	0.0%	1.0%	0.2%	2.4%	0.0%	10.9%	0.0%	4.7%	0.4%	2.6%	0.0%	2.0%	10.9%	50.6%
1992	0.0%	0.0%	0.0%	0.0%	0.0%	19.5%	1.8%	0.0%	0.0%	0.6%	0.8%	0.0%	30.3%	0.0%	5.2%	0.0%	2.0%	0.0%	0.7%	4.1%	34.9%
1993	0.0%	0.0%	0.0%	0.0%	0.0%	20.8%	4.3%	0.0%	0.0%	0.8%	0.0%	0.0%	20.8%	0.0%	2.4%	0.0%	4.5%	0.0%	1.9%	4.5%	40.0%
1994	0.0%	0.0%	0.0%	0.0%	0.0%	31.3%	0.0%	0.0%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	56.3%
1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	12.9%	83.9%
1996	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.1%	0.0%	0.0%	0.0%	0.0%	0.0%	6.5%	0.0%	85.5%
1997	0.0%	0.0%	0.0%	0.0%	0.0%	20.3%	3.5%	0.0%	3.1%	0.0%	0.0%	0.0%	9.3%	0.0%	3.1%	0.0%	0.0%	0.0%	0.9%	9.3%	50.7%
1998	0.0%	0.0%	0.0%	0.0%	5.6%	0.9%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	1.9%	0.0%	0.0%	0.0%	1.9%	24.3%	58.9%
1999	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	9.6%	0.0%	0.0%	0.0%	0.0%	0.0%	8.0%	0.0%	3.4%	0.0%	0.0%	0.0%	3.7%	7.7%	65.3%
2000	0.0%	0.0%	0.0%	0.0%	0.0%	17.6%	12.7%	0.0%	2.5%	0.0%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	4.5%	0.0%	2.5%	4.1%	53.7%
2001	0.0%	0.0%	0.0%	0.0%	0.0%	9.0%	2.6%	0.0%	0.3%	0.0%	0.0%	0.0%	22.1%	0.0%	3.8%	0.1%	1.0%	0.0%	1.4%	5.8%	54.0%
2002	0.5%	0.0%	0.0%	0.0%	0.0%	10.6%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	23.5%	0.0%	8.1%	0.1%	0.0%	0.0%	8.3%	3.5%	41.9%
2003	0.0%	0.0%	0.0%	0.0%	0.0%	15.8%	6.6%	0.0%	0.5%	0.0%	0.0%	0.0%	17.2%	0.0%	7.2%	0.0%	0.9%	0.0%	7.1%	2.5%	42.2%
2004	0.5%	0.0%	0.0%	0.3%	1.0%	22.3%	9.4%	0.0%	0.5%	0.0%	0.0%	0.0%	9.0%	0.0%	3.8%	0.0%	0.1%	0.0%	17.0%	1.3%	34.6%
2005	0.0%	0.0%	0.0%	0.3%	0.0%	30.1%	7.6%	0.0%	0.0%	0.0%	0.0%	0.0%	7.1%	0.0%	2.3%	0.0%	0.0%	0.0%	21.4%	0.2%	31.0%
2006	0.0%	0.0%	0.0%	0.0%	0.0%	18.4%	16.1%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	10.3%	1.1%	51.7%
2007	0.0%	1.3%	0.0%	0.0%	0.0%	15.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%	2.7%	0.0%	0.0%	0.0%	5.3%	3.3%	65.3%
1983-2007	0.1%	0.0%	0.0%	0.1%	0.2%	20.5%	3.4%	0.0%	1.1%	0.5%	0.9%	0.0%	12.9%	0.1%	3.5%	0.5%	2.4%	0.0%	6.5%	4.0%	43.3%
1979-1984	0.1%	0.0%	0.0%	0.1%	0.0%	36.8%	0.4%	0.1%	1.3%	1.6%	2.0%	0.0%	17.3%	0.2%	5.8%	1.6%	4.1%	0.0%	6.5%	0.3%	21.4%
1985-1995	0.0%	0.0%	0.0%	0.0%	0.0%	20.6%	1.5%	0.0%	1.6%	0.5%	1.4%	0.0%	14.4%	0.1%	2.9%	0.4%	3.5%	0.0%	5.7%	4.4%	42.8%
1996-1998	0.0%	0.0%	0.0%	0.0%	1.9%	7.1%	3.0%	0.0%	1.0%	0.0%	0.0%	0.0%	6.1%	0.0%	1.7%	0.0%	0.0%	0.0%	3.1%	11.2%	65.0%
1999-2007	0.1%	0.1%	0.0%	0.1%	0.1%	15.7%	7.6%	0.0%	0.4%	0.0%	0.0%	0.0%	10.9%	0.0%	3.5%	0.0%	0.7%	0.0%	8.6%	3.3%	48.9%



Appendix C.63. Percent distribution of Columbia River Upriver Bright reported catch among fisheries and escapement.

Catch Year	AABM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Trawl	Net	Sport	Trawl	Sport	Trawl	Sport	Trawl	Sport	Trawl	Net	Sport	Trawl	Net	Sport	Net	Sport	Trawl	Net	Sport	
1979	17.6%	0.3%	0.6%	7.5%	0.1%	12.6%	0.0%	0.4%	0.1%	4.0%	4.4%	0.0%	1.3%	0.1%	1.1%	0.1%	0.2%	0.0%	22.7%	0.5%	26.4%
1980	19.9%	0.6%	0.5%	6.5%	0.1%	7.3%	0.0%	0.4%	0.6%	1.6%	1.9%	0.0%	1.1%	0.0%	0.7%	0.0%	0.4%	0.0%	6.3%	0.7%	51.4%
1981	16.1%	0.0%	0.4%	5.6%	0.0%	3.8%	0.2%	0.2%	0.2%	1.1%	1.8%	0.0%	0.5%	0.0%	0.8%	0.0%	0.2%	0.0%	3.6%	0.0%	65.6%
1982	6.4%	0.4%	0.2%	3.5%	0.1%	4.6%	0.0%	0.0%	0.0%	0.2%	1.5%	0.0%	0.6%	0.0%	0.7%	0.0%	0.0%	0.0%	2.5%	0.0%	79.2%
1983	15.6%	0.2%	0.0%	10.3%	0.2%	3.7%	0.0%	0.0%	0.2%	1.8%	3.6%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	8.2%	0.0%	55.9%
1984	14.5%	1.1%	0.1%	8.9%	0.2%	7.2%	0.2%	0.0%	0.2%	2.0%	2.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.6%	0.0%	15.2%	1.2%	46.1%
1985	9.2%	1.2%	0.2%	8.7%	0.0%	7.9%	0.1%	0.0%	0.1%	0.8%	2.5%	0.0%	0.4%	0.0%	0.5%	0.1%	0.4%	0.0%	32.8%	3.6%	31.5%
1986	10.3%	0.7%	0.1%	8.0%	0.0%	6.3%	0.1%	0.0%	0.1%	1.2%	1.2%	0.0%	0.7%	0.0%	0.1%	0.0%	0.4%	0.0%	33.1%	1.9%	35.6%
1987	14.6%	0.4%	0.4%	12.4%	0.1%	7.6%	0.3%	0.0%	0.0%	1.8%	0.7%	0.0%	1.5%	0.1%	0.4%	0.0%	0.6%	0.0%	35.1%	2.7%	21.2%
1988	10.2%	0.6%	0.5%	7.4%	0.0%	11.2%	0.0%	0.0%	0.0%	0.6%	0.7%	0.0%	2.1%	0.0%	0.5%	0.1%	0.2%	0.0%	46.9%	2.0%	16.9%
1989	11.9%	0.0%	0.2%	14.9%	0.6%	7.7%	0.0%	0.0%	0.0%	0.2%	1.5%	0.0%	1.2%	0.0%	0.3%	0.0%	0.0%	0.0%	42.5%	1.7%	17.3%
1990	13.6%	0.0%	1.0%	9.9%	0.0%	8.1%	0.0%	0.0%	0.0%	0.7%	0.7%	0.0%	1.2%	0.0%	0.4%	0.0%	0.7%	0.0%	33.6%	1.2%	26.6%
1991	6.3%	0.4%	2.6%	5.9%	0.0%	8.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	19.6%	4.4%	51.1%
1992	3.0%	0.0%	0.0%	3.0%	0.0%	10.6%	1.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	17.2%	6.0%	55.6%
1993	10.9%	0.0%	0.0%	6.7%	0.6%	17.5%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	1.7%	0.0%	1.3%	0.0%	0.6%	0.0%	15.6%	4.4%	40.2%
1994	9.8%	0.9%	0.0%	8.0%	1.7%	6.9%	0.7%	0.0%	0.0%	0.2%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.2%	3.5%	53.1%
1995	8.1%	0.1%	1.7%	2.0%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.7%	0.0%	0.7%	0.0%	0.0%	0.0%	9.9%	3.6%	67.3%
1996	2.9%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.6%	0.0%	0.0%	0.0%	0.3%	0.0%	22.4%	5.1%	68.0%
1997	11.0%	0.3%	2.5%	4.5%	0.6%	0.5%	0.1%	0.0%	0.0%	0.2%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.6%	11.4%	47.2%
1998	6.1%	1.5%	2.2%	2.6%	1.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.6%	6.3%	64.5%
1999	10.4%	0.5%	2.6%	3.6%	1.0%	0.0%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.5%	0.0%	0.6%	0.0%	0.0%	0.0%	13.5%	8.9%	57.2%
2000	16.7%	0.1%	2.3%	0.0%	1.8%	0.9%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.2%	0.0%	0.0%	0.0%	20.9%	4.4%	50.5%
2001	3.6%	0.0%	0.7%	0.0%	0.7%	0.6%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.5%	0.0%	0.0%	0.0%	12.9%	7.3%	71.2%
2002	14.2%	0.0%	2.3%	1.4%	0.8%	1.4%	0.5%	0.0%	0.4%	0.0%	0.1%	0.0%	1.7%	0.0%	1.0%	0.0%	0.0%	0.0%	16.2%	7.4%	50.5%
2003	13.4%	0.9%	0.6%	4.5%	0.9%	0.7%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.6%	0.0%	0.0%	0.0%	15.0%	6.6%	55.7%
2004	8.7%	1.3%	0.7%	3.2%	1.5%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	1.4%	0.0%	0.2%	0.0%	15.7%	6.1%	58.2%
2005	13.8%	1.4%	0.9%	8.6%	4.0%	3.5%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	1.2%	0.0%	0.0%	0.0%	14.2%	7.0%	42.3%
2006	12.9%	1.6%	1.3%	6.6%	1.5%	1.6%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.4%	0.0%	0.2%	0.0%	13.4%	15.2%	41.7%
2007	10.7%	0.2%	0.6%	6.6%	7.2%	1.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	1.3%	0.0%	0.0%	0.0%	11.9%	14.3%	44.6%
1983-2007	11.2%	0.5%	0.9%	5.9%	0.9%	5.2%	0.4%	0.0%	0.1%	0.6%	1.0%	0.0%	0.6%	0.0%	0.5%	0.0%	0.2%	0.0%	19.0%	4.7%	48.1%
1979-1984	15.0%	0.5%	0.3%	7.0%	0.1%	6.5%	0.1%	0.2%	0.2%	1.6%	2.6%	0.0%	0.7%	0.0%	0.5%	0.0%	0.2%	0.0%	9.7%	0.4%	54.1%
1985-1995	9.6%	0.4%	0.6%	7.9%	0.3%	8.9%	0.2%	0.0%	0.0%	0.5%	1.1%	0.0%	0.9%	0.0%	0.5%	0.0%	0.3%	0.0%	27.3%	3.2%	36.1%
1996-1998	7.3%	0.6%	1.6%	2.4%	0.6%	0.2%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.6%	0.0%	0.0%	0.0%	0.1%	0.0%	18.9%	7.6%	59.9%
1999-2007	11.6%	0.7%	1.4%	3.9%	2.1%	1.4%	0.9%	0.0%	0.1%	0.0%	0.0%	0.0%	0.9%	0.0%	0.8%	0.0%	0.0%	0.0%	15.1%	8.6%	52.5%



**Appendix C.64. Percent distribution of Columbia River Upriver Bright total fishing mortalities among fisheries and escapement.**

Appendix C.64. Percent distribution of Columbia River Upriver Bright total fishing mortalities among fisheries and escapement																						
Catch Year	AABM							ISBM													Esc.	
	SEAK		NBC		WCVI			Geo St		Canada			WA/OR coast			Puget Sound		Terminal				
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1979	18.3%	0.3%	0.6%	7.9%	0.1%	13.3%	0.0%	0.4%	0.1%	4.1%	4.4%	0.0%	1.3%	0.1%	1.1%	0.1%	0.3%	0.0%	21.9%	0.5%	25.3%	
1980	20.8%	0.6%	0.6%	7.0%	0.1%	7.8%	0.0%	0.5%	0.6%	1.7%	1.9%	0.0%	1.1%	0.0%	0.8%	0.0%	0.4%	0.0%	6.2%	0.7%	49.2%	
1981	17.1%	0.0%	0.4%	5.9%	0.0%	4.1%	0.2%	0.2%	0.2%	1.1%	1.8%	0.0%	0.6%	0.0%	0.9%	0.0%	0.2%	0.0%	3.5%	0.0%	63.9%	
1982	8.9%	0.4%	0.3%	4.4%	0.2%	5.5%	0.0%	0.0%	0.0%	0.3%	1.6%	0.0%	0.8%	0.0%	0.7%	0.0%	0.0%	0.0%	2.5%	0.0%	74.5%	
1983	22.2%	0.3%	0.0%	11.3%	0.2%	3.8%	0.0%	0.0%	0.2%	2.0%	3.4%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	7.4%	0.0%	48.8%	
1984	17.6%	1.2%	0.2%	10.1%	0.2%	8.2%	0.2%	0.0%	0.2%	2.2%	2.2%	0.0%	0.2%	0.0%	0.0%	0.0%	1.0%	0.0%	14.4%	1.3%	40.9%	
1985	12.9%	2.3%	0.3%	8.9%	0.0%	8.1%	0.1%	0.0%	0.1%	0.8%	2.4%	0.0%	0.5%	0.0%	0.5%	0.1%	0.5%	0.0%	30.9%	3.6%	28.2%	
1986	12.2%	1.4%	0.1%	8.2%	0.0%	6.7%	0.1%	0.0%	0.1%	1.3%	1.2%	0.0%	0.8%	0.0%	0.2%	0.1%	0.6%	0.0%	31.8%	1.9%	33.4%	
1987	19.4%	1.0%	0.4%	13.1%	0.1%	8.5%	0.3%	0.0%	0.0%	2.0%	0.7%	0.0%	1.5%	0.1%	0.4%	0.0%	0.6%	0.0%	31.3%	2.5%	18.3%	
1988	11.4%	2.1%	0.5%	7.9%	0.0%	12.4%	0.0%	0.0%	0.0%	0.6%	0.7%	0.0%	2.2%	0.0%	0.5%	0.1%	0.2%	0.0%	43.9%	2.0%	15.5%	
1989	14.5%	0.0%	0.2%	15.2%	0.5%	8.1%	0.0%	0.0%	0.0%	0.2%	1.4%	0.0%	1.2%	0.0%	0.3%	0.0%	0.0%	0.0%	40.4%	1.7%	16.1%	
1990	14.2%	0.0%	1.1%	10.8%	0.0%	8.7%	0.0%	0.0%	0.0%	0.8%	0.7%	0.0%	1.3%	0.0%	0.4%	0.0%	0.8%	0.0%	32.6%	1.3%	27.2%	
1991	8.1%	1.3%	3.4%	6.7%	0.0%	10.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.5%	4.7%	46.3%	
1992	3.7%	0.0%	0.0%	3.7%	0.0%	12.6%	1.2%	0.0%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	16.9%	6.7%	51.5%	
1993	16.5%	0.0%	0.0%	7.5%	0.5%	19.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	1.6%	0.0%	1.1%	0.0%	0.7%	0.0%	13.9%	4.3%	34.5%	
1994	11.8%	1.8%	0.0%	8.5%	1.7%	7.3%	0.6%	0.0%	0.0%	0.2%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.6%	3.6%	40.9%	
1995	10.2%	0.1%	2.4%	2.7%	0.0%	7.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.7%	0.0%	0.7%	0.0%	0.4%	0.0%	9.6%	3.9%	62.1%	
1996	4.4%	0.0%	0.0%	1.4%	0.2%	0.7%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.7%	0.0%	0.0%	0.0%	0.4%	0.0%	22.2%	5.8%	63.9%	
1997	12.7%	0.5%	3.2%	4.9%	0.9%	0.6%	0.1%	0.0%	0.0%	0.2%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.7%	11.8%	44.4%	
1998	9.9%	4.5%	2.8%	2.9%	1.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.1%	7.0%	58.4%	
1999	13.4%	1.5%	2.8%	4.1%	1.1%	0.0%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.6%	0.0%	0.8%	0.0%	0.0%	0.0%	12.8%	9.3%	52.8%	
2000	22.2%	0.1%	3.3%	0.0%	2.6%	1.1%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.2%	0.0%	0.0%	0.0%	19.0%	4.3%	44.9%	
2001	5.4%	0.0%	1.0%	0.0%	0.9%	0.8%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.5%	0.0%	0.0%	0.0%	13.0%	8.3%	67.7%	
2002	16.2%	0.0%	2.5%	1.6%	0.9%	1.4%	0.5%	0.0%	0.5%	0.0%	1.1%	0.0%	1.9%	0.0%	1.0%	0.0%	0.0%	0.0%	17.5%	7.8%	47.0%	
2003	14.9%	2.6%	0.6%	4.9%	1.1%	0.7%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.6%	0.0%	0.0%	0.0%	14.3%	7.0%	52.1%	
2004	10.7%	4.2%	0.8%	3.7%	1.9%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	1.4%	0.0%	0.2%	0.0%	14.9%	6.5%	52.8%	
2005	14.8%	1.8%	0.9%	9.3%	4.7%	3.4%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	1.3%	0.0%	0.0%	0.0%	13.6%	7.3%	39.9%	
2006	14.0%	1.9%	1.4%	7.0%	1.7%	1.5%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.4%	0.0%	0.3%	0.0%	12.9%	15.8%	39.7%	
2007	11.8%	0.3%	1.2%	6.6%	9.0%	1.2%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	1.4%	0.0%	0.0%	0.0%	11.2%	15.7%	40.5%	
1983-2007	13.5%	1.0%	1.1%	6.4%	1.0%	5.7%	0.4%	0.0%	0.1%	0.6%	1.0%	0.0%	0.9%	0.0%	0.5%	0.0%	0.2%	0.0%	18.1%	5.0%	44.5%	
1979-1984	17.5%	0.5%	0.3%	7.7%	0.1%	7.1%	0.1%	0.2%	0.2%	1.9%	2.6%	0.0%	0.7%	0.0%	0.6%	0.0%	0.3%	0.0%	9.3%	0.4%	50.4%	
1985-1995	12.3%	0.9%	0.8%	8.5%	0.3%	9.9%	0.2%	0.0%	0.0%	0.5%	1.1%	0.0%	1.0%	0.0%	0.4%	0.0%	0.3%	0.0%	25.8%	3.3%	34.8%	
1996-1998	9.0%	1.7%	2.0%	3.1%	0.8%	0.5%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.6%	0.0%	0.0%	0.0%	0.1%	0.0%	18.3%	8.2%	55.6%	
1999-2007	13.7%	1.4%	1.6%	4.1%	2.7%	1.3%	1.0%	0.0%	0.1%	0.0%	0.1%	0.0%	1.0%	0.0%	0.8%	0.0%	0.1%	0.0%	14.4%	9.1%	48.6%	

Appendix C.65. Percent distribution of Hanford Wild Brights reported catch among fisheries and escapement.

Catch Year	AABM							ISBM													Eso.
	SEAK		NBC		WCVI			Geo Sit		Canada			WAVOR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1990	8.4%	0.5%	0.0%	4.3%	0.0%	8.4%	3.6%	0.0%	0.0%	0.5%	0.7%	0.0%	0.5%	0.0%	0.9%	0.0%	0.0%	0.0%	22.5%	6.1%	43.6%
1991	8.6%	0.0%	1.3%	9.4%	0.5%	4.7%	0.0%	0.0%	0.8%	0.2%	0.0%	0.0%	1.0%	0.0%	0.5%	0.0%	0.0%	0.0%	23.3%	3.9%	45.7%
1992	16.4%	1.7%	1.4%	5.9%	0.0%	16.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	1.0%	0.0%	0.0%	0.0%	18.5%	1.7%	36.2%
1993	14.0%	0.0%	2.1%	2.9%	1.3%	5.3%	1.9%	0.0%	0.0%	0.0%	2.4%	0.0%	3.7%	0.0%	0.0%	0.0%	0.8%	0.0%	16.1%	7.4%	42.1%
1994	14.4%	0.8%	0.0%	4.8%	0.0%	4.4%	0.0%	0.0%	0.0%	0.3%	1.4%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	12.4%	5.4%	55.3%
1995	11.0%	0.0%	3.7%	4.3%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.8%	7.0%	62.0%
1996	9.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.4%	7.8%	53.5%
1997	16.2%	0.6%	0.9%	3.6%	2.5%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	13.9%	7.4%	53.1%
1998	12.7%	0.0%	0.0%	8.4%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.2%	6.3%	53.0%
1999	10.4%	0.4%	2.1%	7.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.9%	6.7%	60.4%
2000	16.4%	0.5%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	29.1%	5.5%	46.8%
2001	4.3%	1.2%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	20.5%	14.4%	57.6%
2002	13.9%	0.0%	1.3%	0.7%	0.7%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.2%	0.0%	0.0%	0.0%	10.0%	10.7%	58.2%
2003	12.6%	0.0%	0.9%	3.9%	0.6%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.3%	0.0%	0.0%	0.0%	14.3%	9.2%	57.2%
2004	17.3%	0.0%	2.9%	6.1%	2.3%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.2%	0.3%	0.0%	0.0%	0.0%	14.9%	4.0%	48.7%
2005	11.8%	0.0%	0.0%	8.0%	3.3%	4.2%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	1.1%	0.0%	0.0%	0.0%	12.2%	15.1%	40.8%
2006	17.2%	0.0%	0.9%	5.0%	0.0%	2.8%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	15.2%	19.4%	36.5%
2007	19.9%	0.0%	1.0%	5.6%	16.4%	2.8%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	11.2%	33.9%
1983-2007	13.1%	0.3%	1.2%	4.5%	1.7%	3.2%	0.5%	0.0%	0.0%	0.0%	0.3%	0.0%	0.9%	0.0%	0.2%	0.0%	0.0%	0.0%	16.6%	8.3%	49.1%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	12.1%	0.5%	1.4%	5.3%	0.3%	6.9%	0.9%	0.0%	0.1%	0.1%	0.7%	0.0%	1.2%	0.0%	0.4%	0.0%	0.1%	0.0%	17.1%	5.3%	47.5%
1996-1998	12.9%	0.2%	0.3%	4.0%	1.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	19.8%	7.2%	53.2%
1999-2007	13.8%	0.2%	1.3%	4.0%	2.6%	1.7%	0.4%	0.0%	0.0%	0.0%	0.1%	0.0%	0.9%	0.0%	0.2%	0.0%	0.0%	0.0%	15.1%	10.7%	48.9%

**Appendix C.66. Percent distribution of Hanford Wild Brights total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WVOR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1990	9.3%	1.1%	0.4%	5.1%	0.0%	8.9%	3.6%	0.0%	0.0%	0.4%	0.6%	0.0%	0.6%	0.0%	0.8%	0.0%	0.0%	0.0%	21.7%	6.6%	40.8%
1991	10.7%	0.0%	1.4%	10.4%	0.5%	5.1%	0.0%	0.0%	1.0%	0.2%	0.0%	0.0%	1.1%	0.0%	0.5%	0.0%	0.0%	0.0%	22.1%	4.0%	43.2%
1992	18.1%	5.4%	1.5%	6.9%	0.0%	16.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.9%	0.0%	0.0%	0.0%	16.3%	1.5%	31.4%
1993	20.6%	0.0%	2.1%	3.0%	1.2%	6.0%	1.9%	0.0%	0.0%	0.0%	2.1%	0.0%	3.7%	0.0%	0.0%	0.0%	0.9%	0.0%	14.4%	7.2%	36.9%
1994	17.5%	1.9%	0.0%	5.2%	0.0%	4.7%	0.0%	0.0%	0.0%	0.3%	1.3%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	11.7%	5.5%	51.2%
1995	13.1%	0.0%	4.1%	5.4%	0.0%	2.8%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.3%	7.1%	58.0%
1996	12.8%	0.0%	0.0%	0.9%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	27.1%	7.9%	50.0%
1997	17.8%	1.2%	1.0%	3.6%	3.1%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	13.3%	7.6%	50.4%
1998	14.5%	0.0%	0.0%	9.4%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.5%	6.6%	50.1%
1999	13.8%	1.5%	2.3%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.3%	6.5%	55.8%
2000	19.7%	0.4%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	27.8%	5.6%	44.0%
2001	5.9%	2.7%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	19.7%	15.1%	54.1%
2002	17.6%	0.0%	1.4%	0.8%	0.9%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.2%	0.0%	0.0%	0.0%	9.5%	11.0%	54.1%
2003	13.6%	0.0%	0.9%	4.1%	0.8%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.3%	0.0%	0.0%	0.0%	14.1%	9.7%	55.5%
2004	18.9%	0.0%	3.1%	6.5%	3.1%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.2%	0.4%	0.0%	0.0%	0.0%	14.3%	4.2%	46.3%
2005	13.0%	0.0%	0.0%	8.6%	4.0%	4.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	1.0%	0.0%	0.0%	0.0%	11.7%	15.7%	38.4%
2006	19.1%	0.0%	1.0%	5.2%	0.0%	2.8%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	14.4%	19.8%	34.3%
2007	23.4%	0.0%	0.9%	5.6%	18.1%	2.5%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%	10.9%	30.2%
1983-2007	15.5%	0.8%	1.3%	4.9%	1.9%	3.4%	0.5%	0.0%	0.1%	0.0%	0.3%	0.0%	0.9%	0.0%	0.2%	0.0%	0.1%	0.0%	15.7%	8.5%	45.8%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	14.9%	1.4%	1.6%	6.0%	0.3%	7.4%	0.9%	0.0%	0.2%	0.1%	0.7%	0.0%	1.2%	0.0%	0.4%	0.0%	0.2%	0.0%	15.9%	5.3%	43.6%
1996-1998	15.1%	0.4%	0.3%	4.6%	2.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	19.0%	7.4%	50.2%
1999-2007	16.1%	0.5%	1.5%	4.3%	3.0%	1.7%	0.4%	0.0%	0.0%	0.0%	0.1%	0.0%	1.0%	0.0%	0.2%	0.0%	0.0%	0.0%	14.4%	11.0%	45.9%

**Appendix C.67. Percent distribution of Lyons Ferry reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1988	2.8%	0.0%	0.0%	3.3%	0.0%	18.6%	0.0%	0.0%	0.0%	0.6%	1.0%	0.0%	10.8%	0.0%	0.3%	0.0%	0.0%	0.0%	29.7%	3.6%	29.4%
1989	2.8%	0.0%	0.0%	6.3%	0.0%	15.9%	0.9%	0.0%	0.0%	0.0%	1.6%	0.0%	12.3%	0.0%	3.4%	0.0%	0.0%	0.0%	27.2%	3.2%	26.5%
1990	5.3%	0.0%	0.0%	3.5%	0.0%	16.1%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	9.6%	0.0%	3.4%	0.0%	1.4%	0.0%	26.4%	1.0%	32.8%
1991	2.7%	0.0%	1.8%	4.9%	0.0%	8.8%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	4.0%	0.0%	1.3%	0.0%	0.0%	0.0%	12.8%	1.3%	61.1%
1992	1.2%	1.2%	0.0%	3.5%	0.0%	10.6%	2.9%	0.0%	0.0%	0.0%	2.4%	0.0%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%	8.2%	1.8%	62.4%
1993	3.6%	0.0%	0.0%	4.7%	0.0%	10.3%	0.0%	0.0%	0.0%	0.8%	2.0%	0.0%	7.9%	0.0%	1.6%	0.0%	0.0%	0.0%	13.8%	0.0%	55.3%
1994	6.1%	0.5%	1.4%	6.1%	0.0%	7.1%	0.0%	0.0%	0.7%	0.7%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.3%	0.5%	67.0%
2003	6.9%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.1%	0.0%	1.3%	0.0%	0.0%	0.0%	11.6%	3.6%	70.4%
2004	2.3%	0.0%	0.0%	1.4%	1.4%	1.7%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	5.2%	0.0%	1.7%	0.0%	0.0%	0.0%	4.4%	2.5%	78.3%
2005	3.5%	0.2%	0.0%	3.0%	1.2%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%	0.0%	2.5%	0.0%	1.4%	0.0%	13.2%	0.9%	66.5%
2006	2.1%	0.0%	0.0%	0.3%	1.8%	0.4%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0.7%	0.0%	0.0%	0.0%	5.3%	0.7%	85.0%
2007	0.2%	0.1%	0.0%	0.8%	0.6%	2.8%	0.8%	0.0%	0.3%	0.0%	0.1%	0.0%	0.9%	0.0%	1.7%	0.0%	0.3%	0.0%	8.0%	6.1%	77.5%
1983-2007	3.3%	0.2%	0.3%	3.1%	0.4%	8.1%	0.5%	0.0%	0.1%	0.2%	1.0%	0.0%	5.7%	0.0%	1.5%	0.0%	0.3%	0.0%	14.0%	2.1%	59.3%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	3.5%	0.2%	0.5%	4.6%	0.0%	12.5%	0.5%	0.0%	0.1%	0.3%	1.6%	0.0%	7.2%	0.0%	1.4%	0.0%	0.2%	0.0%	17.9%	1.6%	47.8%
1996-1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1999-2007	3.0%	0.1%	0.0%	1.1%	1.0%	2.0%	0.5%	0.0%	0.1%	0.0%	0.0%	0.0%	3.6%	0.0%	1.6%	0.0%	0.3%	0.0%	8.5%	2.8%	75.6%

**Appendix C.68. Percent distribution of Lyons Ferry total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1988	3.2%	0.0%	0.1%	4.0%	0.0%	21.1%	0.0%	0.0%	0.0%	0.6%	0.9%	0.0%	11.6%	0.0%	0.5%	0.0%	0.0%	0.0%	27.7%	3.5%	26.8%
1989	4.2%	0.0%	0.0%	7.0%	0.0%	17.9%	0.9%	0.0%	0.0%	0.0%	1.4%	0.0%	12.9%	0.0%	3.3%	0.0%	0.0%	0.0%	25.4%	3.3%	23.8%
1990	5.5%	0.0%	0.0%	3.7%	0.0%	17.1%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	10.0%	0.0%	3.5%	0.0%	1.7%	0.0%	25.7%	1.1%	31.3%
1991	3.4%	0.0%	2.1%	5.5%	0.0%	10.1%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	4.2%	0.0%	1.7%	0.0%	0.0%	0.0%	12.6%	1.3%	58.0%
1992	1.6%	5.2%	0.0%	4.2%	0.0%	12.0%	3.1%	0.0%	0.0%	0.0%	2.6%	0.0%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	7.8%	2.1%	55.2%
1993	5.4%	0.7%	0.4%	5.8%	0.0%	11.6%	0.0%	0.0%	0.0%	1.1%	1.8%	0.0%	8.0%	0.0%	1.4%	0.0%	0.0%	0.0%	13.0%	0.0%	50.7%
1994	7.1%	1.2%	1.3%	5.9%	0.0%	7.4%	0.0%	0.0%	0.7%	0.7%	3.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.2%	0.0%	7.4%	0.7%	63.7%
2003	7.7%	0.0%	0.0%	0.5%	0.2%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	0.0%	1.4%	0.0%	0.2%	0.0%	11.6%	4.6%	66.2%
2004	2.6%	0.0%	0.0%	1.6%	1.8%	1.8%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	5.5%	0.0%	1.9%	0.0%	0.2%	0.0%	4.8%	2.7%	75.9%
2005	4.0%	0.2%	0.0%	3.3%	1.6%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	0.0%	2.7%	0.0%	2.0%	0.0%	13.3%	1.1%	63.9%
2006	3.0%	0.0%	0.0%	0.4%	2.6%	0.4%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	0.0%	0.8%	0.0%	0.0%	0.0%	5.4%	0.8%	81.7%
2007	0.4%	0.2%	0.0%	1.3%	1.0%	3.9%	1.0%	0.0%	0.4%	0.0%	0.1%	0.0%	1.1%	0.0%	1.9%	0.0%	1.8%	0.0%	8.2%	7.6%	71.3%
1983-2007	4.0%	0.6%	0.3%	3.6%	0.6%	9.0%	0.6%	0.0%	0.1%	0.2%	1.0%	0.0%	6.2%	0.0%	1.6%	0.0%	0.5%	0.0%	13.6%	2.4%	55.7%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	4.3%	1.0%	0.6%	5.1%	0.0%	13.9%	0.6%	0.0%	0.1%	0.3%	1.7%	0.0%	7.6%	0.0%	1.5%	0.0%	0.3%	0.0%	17.1%	1.7%	44.2%
1996-1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1999-2007	3.5%	0.1%	0.0%	1.4%	1.4%	2.3%	0.6%	0.0%	0.1%	0.0%	0.0%	0.0%	4.2%	0.0%	1.8%	0.0%	0.8%	0.0%	8.7%	3.4%	71.8%



Appendix C.69. Percent distribution of Lewis River Wild reported catch among fisheries and escapement.

Catch Year	AABM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo St		Canada			WV/O coastal			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1981	6.4%	0.0%	0.0%	3.3%	2.1%	6.0%	0.0%	0.0%	0.0%	1.4%	0.9%	0.0%	2.0%	0.0%	2.6%	0.1%	0.2%	0.0%	4.1%	13.1%	57.8%
1982	6.0%	1.3%	0.2%	3.0%	0.0%	10.7%	0.0%	0.4%	0.0%	1.4%	1.5%	0.0%	4.1%	0.9%	7.5%	0.6%	0.8%	0.0%	4.7%	15.3%	41.7%
1986	4.9%	0.0%	0.0%	1.6%	0.0%	6.8%	2.5%	0.0%	0.0%	2.2%	0.9%	0.0%	3.3%	0.0%	0.8%	0.0%	0.0%	0.0%	26.6%	11.5%	39.0%
1987	4.1%	0.0%	0.0%	4.7%	0.0%	8.4%	0.9%	0.0%	0.0%	1.3%	0.0%	0.0%	2.7%	0.4%	0.9%	0.0%	0.3%	0.0%	25.3%	5.1%	46.0%
1988	4.4%	0.0%	0.0%	2.9%	0.0%	8.9%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	4.7%	0.0%	1.1%	0.0%	1.1%	0.0%	23.1%	14.5%	38.7%
1989	1.8%	0.2%	0.2%	4.5%	0.5%	5.1%	0.5%	0.0%	0.0%	0.2%	1.5%	0.0%	4.9%	0.2%	0.7%	0.0%	0.0%	0.0%	9.2%	6.6%	63.9%
1990	5.4%	0.0%	0.0%	1.7%	0.6%	12.1%	0.8%	0.0%	0.0%	0.4%	0.6%	0.0%	4.0%	0.0%	1.8%	0.0%	1.1%	0.0%	3.3%	2.2%	65.6%
1991	6.0%	0.1%	0.0%	3.8%	1.1%	5.9%	0.0%	0.0%	0.0%	0.5%	0.7%	0.0%	2.4%	0.0%	1.1%	0.0%	0.0%	0.0%	15.8%	6.0%	56.6%
1992	1.6%	0.0%	0.0%	3.8%	0.7%	6.2%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	2.9%	0.0%	0.7%	0.0%	0.9%	0.0%	4.5%	21.7%	55.1%
1993	3.6%	0.0%	1.0%	4.9%	0.0%	7.6%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	0.8%	0.0%	0.5%	0.0%	0.0%	0.0%	6.8%	8.6%	64.3%
1994	6.4%	0.0%	0.0%	3.2%	0.0%	3.2%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	83.2%
1995	6.6%	0.0%	2.3%	3.2%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	24.6%	57.6%
1996	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	4.6%	84.0%
1997	12.6%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	80.7%
1998	8.1%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	2.0%	84.8%
1999	11.8%	0.0%	0.0%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	82.4%
2000	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.4%	3.0%	77.6%
2001	4.9%	0.0%	1.3%	0.0%	0.0%	8.5%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	5.8%	0.0%	2.2%	0.0%	0.0%	0.0%	2.2%	3.1%	69.1%
2002	11.4%	0.0%	1.7%	0.0%	0.0%	6.1%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	2.2%	0.0%	0.0%	0.0%	4.7%	2.5%	60.9%
2003	9.4%	0.0%	0.0%	1.5%	1.1%	5.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%	0.0%	1.1%	0.0%	0.0%	0.0%	6.8%	5.9%	58.8%
2004	6.0%	0.0%	0.5%	3.1%	0.8%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.1%	0.0%	0.0%	0.0%	2.5%	1.9%	82.4%
2005	3.3%	0.0%	0.0%	11.4%	3.5%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.8%	0.0%	0.0%	0.0%	11.4%	16.4%	47.7%
2006	13.6%	0.0%	0.5%	6.8%	1.4%	8.3%	0.9%	0.0%	1.9%	0.0%	0.0%	0.0%	1.6%	0.0%	0.5%	0.0%	0.0%	0.0%	5.7%	19.0%	39.8%
2007	34.3%	0.0%	1.1%	6.1%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.2%	0.0%	3.3%	0.0%	0.0%	0.0%	3.3%	0.0%	42.5%
1983-2007	7.6%	0.1%	0.4%	3.4%	0.5%	5.1%	0.6%	0.0%	0.1%	0.4%	0.4%	0.0%	2.8%	0.1%	1.2%	0.0%	0.2%	0.0%	7.5%	6.0%	61.7%
1979-1984	6.2%	0.6%	0.1%	3.2%	1.1%	8.3%	0.0%	0.2%	0.0%	1.4%	1.2%	0.0%	3.1%	0.4%	5.0%	0.4%	0.5%	0.0%	4.4%	14.2%	49.7%
1985-1995	4.5%	0.0%	0.4%	3.4%	0.3%	6.9%	0.5%	0.0%	0.0%	0.6%	0.8%	0.0%	2.6%	0.1%	0.8%	0.0%	0.3%	0.0%	11.6%	10.1%	57.0%
1996-1998	9.5%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	3.4%	83.2%
1999-2007	10.8%	0.0%	0.6%	3.9%	0.8%	4.0%	1.1%	0.0%	0.2%	0.0%	0.0%	0.0%	3.5%	0.0%	1.1%	0.0%	0.0%	0.0%	5.9%	5.7%	62.4%

Appendix C.70. Percent distribution of Lewis River Wild total fishing mortalities among fisheries and escapement.

Catch Year	AASM							ISSM															Esc.
	SEAK		NBC		WCVI			Geo St		Canada			WAVOR coast			Puget Sound		Terminal					
	Trawl	Net	Sport	Trawl	Sport	Trawl	Sport	Trawl	Sport	Trawl	Net	Sport	Trawl	Net	Sport	Net	Sport	Trawl	Net	Sport			
1981	7.4%	0.0%	0.0%	3.8%	2.1%	7.5%	0.0%	0.0%	0.0%	1.6%	1.0%	0.0%	2.5%	0.0%	2.9%	0.2%	0.2%	0.0%	4.0%	13.7%	53.1%		
1982	7.4%	1.2%	0.2%	3.5%	0.0%	11.7%	0.0%	0.4%	0.0%	1.6%	1.4%	0.0%	4.2%	0.8%	7.5%	0.6%	0.8%	0.0%	4.5%	15.2%	38.8%		
1986	6.4%	0.0%	0.0%	2.2%	0.0%	8.0%	2.6%	0.0%	0.0%	2.2%	1.0%	0.0%	3.8%	0.0%	0.7%	0.0%	0.0%	0.0%	25.5%	11.6%	36.0%		
1987	5.7%	0.0%	0.0%	5.3%	0.0%	9.5%	0.9%	0.0%	0.0%	1.4%	0.0%	0.0%	2.9%	0.4%	0.9%	0.0%	0.3%	0.0%	24.5%	5.3%	42.7%		
1988	5.2%	0.0%	0.0%	3.5%	0.0%	10.7%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	5.0%	0.0%	1.1%	0.0%	1.4%	0.0%	21.9%	15.2%	35.4%		
1989	2.4%	0.6%	0.3%	5.1%	0.4%	5.8%	0.5%	0.0%	0.0%	0.2%	1.6%	0.0%	5.4%	0.3%	0.7%	0.0%	0.0%	0.0%	9.0%	7.1%	60.5%		
1990	7.6%	0.0%	0.0%	1.9%	0.6%	13.3%	0.8%	0.0%	0.0%	0.5%	0.7%	0.0%	4.2%	0.0%	1.6%	0.0%	1.3%	0.0%	3.2%	2.3%	61.5%		
1991	7.0%	0.3%	0.0%	4.1%	1.2%	6.4%	0.0%	0.0%	0.0%	0.4%	0.7%	0.0%	2.5%	0.0%	1.1%	0.0%	0.0%	0.0%	15.4%	6.6%	54.2%		
1992	1.7%	0.0%	0.0%	4.3%	0.7%	6.7%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	3.1%	0.0%	0.7%	0.0%	1.0%	0.0%	4.5%	23.2%	52.2%		
1993	4.4%	0.0%	1.2%	5.7%	0.0%	8.4%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	1.5%	0.0%	0.5%	0.0%	0.0%	0.0%	6.7%	6.9%	61.0%		
1994	9.4%	0.0%	0.0%	4.9%	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	78.2%		
1995	7.6%	0.0%	2.3%	3.9%	0.0%	6.4%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.3%	53.8%		
1996	9.0%	0.0%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	4.8%	61.9%		
1997	14.0%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.9%	78.9%		
1998	8.1%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	2.0%	64.8%		
1999	18.3%	0.0%	1.7%	5.0%	0.0%	1.7%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	70.0%		
2000	6.6%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	15.1%	2.7%	71.2%		
2001	5.9%	0.0%	1.7%	0.0%	0.0%	8.9%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	0.0%	3.0%	0.0%	0.0%	0.0%	2.1%	3.4%	65.0%		
2002	14.5%	0.0%	1.8%	0.0%	0.0%	5.9%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	6.6%	0.0%	2.3%	0.0%	0.0%	0.0%	4.6%	2.6%	56.1%		
2003	10.5%	0.0%	0.0%	1.7%	1.3%	5.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	10.3%	0.0%	1.0%	0.0%	0.0%	0.0%	6.5%	6.1%	58.5%		
2004	6.6%	0.0%	0.5%	3.4%	1.1%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.1%	0.0%	0.0%	0.0%	2.5%	2.0%	60.9%		
2005	3.8%	0.0%	0.0%	12.2%	4.3%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.7%	0.0%	0.0%	0.0%	11.0%	17.0%	45.2%		
2006	14.4%	0.0%	0.5%	6.8%	1.5%	8.3%	1.0%	0.0%	2.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.5%	0.0%	0.0%	0.0%	5.5%	19.7%	38.2%		
2007	36.7%	0.0%	1.0%	5.7%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%	3.1%	0.0%	0.0%	0.0%	3.1%	0.0%	39.7%		
1983-2007	9.3%	0.1%	0.5%	3.7%	0.5%	5.7%	0.8%	0.0%	0.1%	0.4%	0.4%	0.0%	3.2%	0.1%	1.2%	0.0%	0.2%	0.0%	7.3%	6.3%	58.2%		
1979-1984	7.4%	0.6%	0.1%	3.6%	1.1%	9.6%	0.0%	0.2%	0.0%	1.6%	1.2%	0.0%	3.3%	0.4%	5.2%	0.4%	0.5%	0.0%	4.3%	14.5%	46.0%		
1985-1995	5.6%	0.1%	0.4%	4.1%	0.3%	7.9%	0.5%	0.0%	0.0%	0.7%	0.6%	0.0%	2.9%	0.1%	0.6%	0.0%	0.4%	0.0%	11.2%	10.6%	53.6%		
1996-1998	10.4%	0.0%	0.0%	2.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	3.6%	61.9%		
1999-2007	13.3%	0.0%	1.0%	3.9%	0.9%	4.2%	1.5%	0.0%	0.2%	0.0%	0.0%	0.0%	4.3%	0.0%	1.2%	0.0%	0.0%	0.0%	5.6%	5.9%	56.1%		

**Appendix C.71. Percent distribution of Salmon River reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.	
	SEAK			NBC		WCVI		Geo St			Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport		
1981	13.9%	0.0%	0.4%	28.2%	0.0%	3.7%	0.7%	0.0%	0.0%	0.6%	1.8%	0.0%	1.3%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	16.2%	32.2%	
1982	10.4%	1.5%	0.9%	14.4%	0.0%	7.0%	0.0%	0.0%	0.0%	1.1%	0.8%	0.0%	2.6%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	20.3%	39.9%	
1983	20.9%	0.6%	0.0%	20.5%	0.0%	10.5%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	15.0%	31.0%	
1984	10.5%	0.0%	0.0%	17.5%	0.0%	3.4%	0.0%	0.0%	0.0%	3.5%	1.2%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.4%	21.0%	42.1%	
1985	12.3%	6.7%	0.0%	16.2%	0.0%	1.6%	0.0%	0.0%	0.0%	1.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.6%	41.2%	
1986	14.6%	0.0%	0.0%	12.9%	0.0%	2.1%	0.0%	0.0%	0.0%	4.5%	0.6%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	15.0%	49.9%	
1987	10.4%	0.0%	0.0%	15.3%	0.0%	2.4%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	2.6%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	23.0%	44.8%	
1988	9.6%	0.0%	0.0%	6.4%	0.0%	3.9%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.8%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	14.5%	62.7%	
1989	8.4%	0.0%	0.0%	11.4%	0.0%	3.9%	0.0%	0.0%	0.0%	1.4%	0.0%	3.4%	0.0%	0.4%	0.0%	0.3%	0.0%	0.0%	0.0%	24.0%	46.8%	
1990	11.9%	0.7%	0.0%	10.6%	1.3%	7.8%	0.0%	0.0%	0.0%	0.3%	0.9%	0.0%	3.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	23.9%	37.9%	
1991	18.4%	0.0%	0.5%	15.2%	0.8%	5.8%	0.0%	0.0%	0.0%	0.1%	0.7%	0.0%	0.2%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	24.5%	33.4%	
1992	2.6%	0.6%	0.0%	6.6%	1.8%	14.8%	0.0%	0.0%	0.0%	0.8%	0.4%	0.0%	1.8%	0.0%	0.5%	0.0%	0.2%	0.0%	0.0%	15.3%	54.5%	
1993	7.7%	0.2%	0.2%	15.3%	1.1%	18.2%	0.0%	0.0%	0.0%	0.2%	0.5%	0.0%	3.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	22.7%	30.6%	
1994	8.7%	0.2%	1.0%	14.8%	2.1%	4.7%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	1.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	17.3%	48.9%	
1995	6.8%	0.2%	0.3%	4.6%	1.0%	0.9%	0.2%	0.0%	0.0%	0.1%	0.1%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	30.4%	55.3%	
1996	11.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	51.6%	31.5%	
1997	27.7%	0.0%	1.6%	3.3%	0.4%	0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	1.4%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	19.0%	46.1%	
1998	10.4%	0.4%	0.4%	11.1%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	1.0%	0.0%	0.0%	0.0%	0.1%	31.4%	44.2%	
1999	12.3%	0.4%	0.0%	2.7%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	34.6%	45.1%	
2000	12.8%	0.0%	0.5%	2.2%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	19.7%	61.7%	
2001	12.2%	0.0%	0.7%	3.3%	2.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	0.0%	1.5%	0.0%	0.0%	0.0%	0.1%	25.1%	52.2%	
2002	17.7%	0.0%	0.9%	7.1%	1.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	32.9%	36.3%	
2003	12.9%	0.6%	0.6%	5.8%	1.6%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	32.5%	41.4%	
2004	18.1%	0.8%	0.8%	7.3%	3.5%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	22.9%	42.7%	
2005	19.5%	0.0%	1.2%	8.4%	5.6%	2.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.1%	1.3%	0.0%	0.0%	0.0%	0.0%	30.1%	29.7%	
2006	23.8%	0.0%	1.6%	12.1%	7.5%	2.0%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.1%	2.9%	0.0%	0.0%	0.0%	0.1%	26.3%	20.3%	
2007	12.7%	0.0%	0.9%	6.8%	7.2%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	25.2%	46.7%	
1983-2007	13.3%	0.5%	0.5%	10.4%	1.6%	3.6%	0.1%	0.0%	0.0%	0.5%	0.3%	0.0%	1.4%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	24.3%	42.6%	
1979-1984	13.9%	0.5%	0.3%	20.1%	0.0%	6.1%	0.2%	0.0%	0.0%	1.4%	0.9%	0.0%	1.1%	0.0%	0.8%	0.0%	0.0%	0.0%	0.1%	18.1%	36.3%	
1985-1995	10.1%	0.8%	0.2%	11.8%	0.7%	6.0%	0.0%	0.0%	0.0%	0.7%	0.5%	0.0%	1.5%	0.0%	0.6%	0.0%	0.1%	0.0%	0.0%	21.0%	46.0%	
1996-1998	16.4%	0.1%	0.7%	4.8%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	34.0%	40.6%	
1999-2007	15.8%	0.2%	0.8%	6.2%	3.7%	0.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	27.7%	41.8%	

Appendix C.72. Percent distribution of Salmon River total fishing mortalities among fisheries and escapement.

Catch Year	AABM							ISBM													Esc.
	SEAK		NBC		WCVI			Geo St		Canada			WVOR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1981	15.8%	0.0%	0.4%	29.9%	0.0%	4.7%	0.6%	0.0%	0.0%	1.0%	1.8%	0.0%	1.4%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	15.5%	27.9%
1982	14.2%	1.8%	0.9%	17.7%	0.0%	7.4%	0.0%	0.0%	0.0%	1.4%	0.6%	0.0%	2.3%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	19.1%	33.4%
1983	26.6%	0.7%	0.0%	21.3%	0.0%	10.2%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	13.6%	26.3%
1984	11.8%	0.0%	0.0%	16.5%	0.0%	3.5%	0.0%	0.0%	0.0%	3.4%	1.1%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.4%	21.9%	39.1%
1985	15.0%	12.2%	0.0%	15.2%	0.0%	1.6%	0.0%	0.0%	0.0%	1.1%	0.3%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	20.8%	33.5%
1986	21.2%	0.0%	0.0%	14.2%	0.0%	2.9%	0.0%	0.0%	0.0%	4.2%	0.5%	0.0%	0.5%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	14.6%	41.3%
1987	17.7%	0.0%	0.0%	15.5%	0.0%	2.7%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	2.5%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	21.4%	38.6%
1988	15.0%	0.0%	0.0%	6.7%	0.0%	5.3%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.9%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	13.9%	53.6%
1989	16.9%	0.0%	0.0%	16.0%	0.0%	4.5%	0.0%	0.0%	0.0%	1.1%	0.0%	3.2%	0.0%	0.4%	0.0%	0.3%	0.0%	0.0%	0.0%	20.9%	34.6%
1990	16.6%	2.0%	0.0%	12.8%	1.2%	7.9%	0.0%	0.0%	0.0%	0.3%	0.8%	0.0%	2.9%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	21.7%	30.2%
1991	24.1%	0.0%	0.5%	16.4%	0.6%	6.1%	0.0%	0.0%	0.0%	0.1%	0.7%	0.0%	0.2%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	22.6%	28.0%
1992	5.0%	1.8%	0.0%	8.4%	2.1%	17.0%	0.0%	0.0%	0.0%	0.9%	0.3%	0.0%	2.0%	0.0%	0.5%	0.0%	0.2%	0.0%	0.0%	15.0%	46.6%
1993	11.2%	0.6%	0.2%	17.1%	1.0%	19.2%	0.0%	0.0%	0.0%	0.2%	0.4%	0.0%	3.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	21.8%	24.9%
1994	16.2%	0.4%	1.0%	14.9%	2.1%	4.8%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	1.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	16.3%	42.1%
1995	10.3%	0.3%	0.4%	6.7%	1.3%	1.2%	0.2%	0.0%	0.0%	0.2%	0.1%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	30.7%	48.4%
1996	20.5%	0.0%	0.0%	2.7%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.9%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	46.9%	24.6%
1997	32.2%	0.0%	1.7%	3.4%	0.5%	0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	1.5%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	18.7%	41.5%
1998	11.8%	1.2%	0.5%	11.8%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	1.0%	0.0%	0.0%	0.0%	0.1%	31.8%	40.6%
1999	17.8%	0.8%	0.0%	2.9%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	33.7%	38.8%
2000	17.4%	0.0%	0.7%	2.6%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	20.7%	55.1%
2001	16.9%	0.0%	1.0%	3.7%	2.6%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.1%	24.9%	46.1%
2002	21.9%	0.0%	1.1%	7.9%	1.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	32.7%	31.0%
2003	15.1%	2.3%	0.7%	6.5%	1.9%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	32.1%	36.8%
2004	20.8%	2.5%	0.9%	7.7%	4.4%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.3%	37.7%
2005	21.3%	0.0%	1.3%	8.8%	6.6%	2.5%	0.2%	0.0%	0.0%	0.0%	0.0%	1.4%	0.1%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	29.8%	26.8%
2006	26.3%	0.0%	1.6%	12.2%	7.8%	1.8%	2.2%	0.0%	0.0%	0.0%	0.0%	1.1%	0.1%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	25.9%	18.1%
2007	13.6%	0.0%	0.8%	6.6%	8.0%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	25.8%	44.4%
1983-2007	17.7%	1.0%	0.5%	11.5%	1.6%	4.0%	0.1%	0.0%	0.0%	0.6%	0.3%	0.0%	1.3%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	23.5%	36.7%
1979-1984	17.1%	0.6%	0.3%	21.6%	0.0%	6.4%	0.2%	0.0%	0.0%	1.6%	0.9%	0.0%	1.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.1%	17.5%	31.7%
1985-1995	15.6%	1.6%	0.2%	13.3%	0.6%	6.7%	0.0%	0.0%	0.0%	0.6%	0.4%	0.0%	1.5%	0.0%	0.6%	0.0%	0.1%	0.0%	0.0%	20.0%	38.4%
1996-1998	21.5%	0.4%	0.7%	6.0%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	32.4%	35.6%
1999-2007	19.0%	0.6%	0.9%	6.6%	4.4%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	27.5%	37.2%



**Appendix C.73. Percent distribution of Elk Creek reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1981	10.3%	0.0%	0.9%	14.7%	0.0%	12.9%	0.0%	0.0%	0.0%	2.6%	12.1%	0.0%	44.0%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	2.1%	1.5%	0.6%	5.2%	0.0%	14.8%	0.0%	0.0%	0.0%	0.9%	1.9%	0.0%	50.7%	0.0%	2.6%	1.0%	0.0%	0.0%	0.0%	0.0%	18.7%
1983	4.2%	0.2%	0.0%	9.4%	0.0%	11.2%	0.2%	0.0%	0.0%	2.1%	0.0%	0.0%	16.9%	0.0%	0.7%	0.1%	0.4%	0.0%	0.0%	0.0%	54.8%
1984	4.6%	0.0%	0.0%	8.2%	0.3%	10.5%	0.0%	0.0%	0.0%	1.1%	0.4%	0.0%	16.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	57.6%
1985	4.7%	0.0%	0.0%	5.7%	0.0%	3.1%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	14.7%	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	5.1%	62.5%
1986	1.7%	0.0%	0.0%	3.8%	0.0%	15.7%	0.6%	0.0%	0.6%	2.7%	0.0%	0.0%	43.4%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.3%	30.1%
1987	1.2%	0.0%	0.0%	5.5%	0.0%	8.6%	1.2%	0.0%	0.0%	1.2%	0.0%	0.0%	38.8%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	41.7%
1988	0.9%	0.0%	0.0%	5.7%	0.0%	7.3%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	42.5%	0.0%	1.3%	0.0%	0.5%	0.0%	0.0%	0.3%	40.8%
1989	1.0%	0.0%	0.6%	2.3%	0.7%	3.2%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	51.8%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	39.0%
1990	2.1%	0.0%	0.0%	0.0%	0.0%	5.4%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	35.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	54.6%
1991	0.0%	1.0%	0.0%	4.5%	0.0%	11.4%	0.0%	0.0%	0.0%	0.0%	2.5%	0.0%	11.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	68.2%
1992	1.9%	0.9%	0.0%	0.0%	0.0%	6.3%	0.9%	0.0%	0.0%	0.0%	0.5%	0.0%	11.9%	0.0%	0.5%	0.7%	0.0%	0.0%	0.0%	17.5%	59.0%
1993	1.6%	0.0%	0.0%	2.1%	0.7%	5.4%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	27.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	13.0%	48.1%
1994	2.3%	0.3%	0.0%	1.9%	0.5%	3.3%	0.0%	0.0%	0.0%	0.2%	0.8%	0.0%	24.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.6%	43.9%
1995	1.8%	0.1%	0.5%	1.1%	0.4%	2.0%	0.4%	0.0%	0.0%	0.0%	0.9%	0.0%	16.4%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	24.1%	52.2%
1996	1.7%	0.0%	0.0%	0.0%	0.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.3%	0.0%	38.7%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	3.6%	54.8%
1997	15.3%	0.1%	0.0%	2.0%	0.4%	1.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	22.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%	48.7%
1998	9.3%	0.0%	0.0%	4.3%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	12.7%	56.2%
1999	6.2%	0.0%	0.3%	1.4%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	19.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	20.5%	51.7%
2000	5.6%	0.0%	0.1%	1.0%	0.8%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	22.3%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	16.5%	52.2%
2001	3.0%	0.1%	0.2%	1.6%	0.0%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	13.4%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	8.6%	71.2%
2002	5.9%	0.0%	0.6%	4.4%	0.6%	1.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	13.9%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	7.6%	64.3%
2003	6.7%	0.0%	0.3%	4.0%	0.4%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.3%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	13.2%	51.4%
2004	4.6%	0.0%	0.3%	2.3%	0.3%	2.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	15.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	4.5%	70.3%
2005	9.7%	0.0%	0.2%	5.4%	1.2%	4.9%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	18.3%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	9.0%	49.4%
2006	5.5%	0.0%	0.0%	4.4%	1.8%	5.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	20.5%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	11.5%	49.3%
2007	7.4%	0.0%	0.7%	4.1%	2.1%	1.6%	0.5%	0.0%	0.3%	0.0%	0.0%	0.0%	25.8%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	17.5%	38.5%
1983-2007	4.5%	0.2%	0.2%	3.9%	0.4%	5.2%	0.3%	0.0%	0.0%	0.5%	0.8%	0.0%	25.7%	0.0%	0.8%	0.1%	0.0%	0.0%	0.0%	8.2%	40.2%
1979-1984	5.3%	0.4%	0.4%	9.4%	0.1%	12.4%	0.1%	0.0%	0.0%	1.7%	3.6%	0.0%	31.9%	0.0%	1.5%	0.3%	0.1%	0.0%	0.0%	0.3%	32.8%
1985-1995	1.7%	0.2%	0.1%	3.0%	0.2%	6.5%	0.4%	0.0%	0.1%	0.6%	0.5%	0.0%	28.8%	0.0%	0.9%	0.1%	0.0%	0.0%	0.0%	7.8%	40.1%
1996-1998	8.7%	0.0%	0.0%	2.1%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	26.2%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	8.6%	53.3%
1999-2007	6.1%	0.0%	0.3%	3.2%	0.8%	1.9%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	19.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	12.1%	55.4%



**Appendix C.74. Percent distribution of Elk Creek total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1981	9.4%	0.3%	0.7%	13.7%	0.0%	18.6%	0.0%	0.0%	0.0%	2.3%	4.9%	0.0%	47.6%	0.0%	1.6%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	3.4%	1.3%	0.7%	6.0%	0.0%	15.6%	0.0%	0.0%	0.0%	0.9%	1.7%	0.0%	51.9%	0.0%	2.4%	1.1%	0.0%	0.0%	0.0%	0.0%	15.0%
1983	5.3%	0.2%	0.0%	9.9%	0.0%	11.7%	0.2%	0.0%	0.0%	2.2%	0.0%	0.0%	18.3%	0.0%	0.7%	0.1%	0.5%	0.0%	0.0%	0.0%	51.0%
1984	4.9%	0.0%	0.0%	8.5%	0.3%	10.9%	0.0%	0.0%	0.0%	1.1%	0.4%	0.0%	17.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%
1985	5.5%	0.0%	0.0%	6.2%	0.0%	3.5%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	16.3%	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.9%
1986	2.5%	0.0%	0.0%	3.8%	0.0%	16.2%	0.5%	0.0%	0.5%	2.8%	0.0%	0.0%	47.1%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
1987	1.3%	0.0%	0.0%	6.3%	0.0%	10.0%	1.2%	0.0%	0.0%	1.3%	0.0%	0.0%	41.3%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	1.1%	0.0%	0.0%	6.8%	0.0%	8.7%	0.0%	0.0%	0.0%	0.4%	0.3%	0.0%	44.6%	0.0%	1.2%	0.0%	0.5%	0.0%	0.0%	0.0%	0.3%
1989	1.3%	0.0%	0.7%	2.4%	0.8%	3.5%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	54.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	2.3%	0.0%	0.0%	0.0%	0.0%	6.1%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	38.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%
1991	0.0%	2.7%	0.0%	5.8%	0.0%	13.8%	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%	13.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%
1992	4.3%	1.7%	0.0%	0.0%	0.0%	10.2%	1.1%	0.0%	0.0%	0.0%	0.4%	0.0%	16.9%	0.0%	0.6%	1.5%	0.0%	0.0%	0.0%	0.0%	16.5%
1993	4.5%	0.0%	0.0%	3.4%	0.7%	8.2%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	33.4%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	11.5%
1994	5.6%	0.7%	0.0%	2.6%	0.6%	3.8%	0.0%	0.0%	0.0%	0.2%	0.9%	0.0%	23.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	23.0%
1995	3.4%	0.2%	0.8%	1.7%	0.4%	3.1%	0.4%	0.0%	0.0%	0.0%	1.3%	0.0%	16.2%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	25.4%
1996	3.0%	0.0%	0.0%	0.2%	0.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.4%	0.0%	39.5%	0.0%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	3.9%
1997	18.8%	0.2%	0.0%	2.1%	0.5%	1.4%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	24.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.2%
1998	11.2%	0.0%	0.0%	4.8%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	13.1%
1999	9.0%	0.0%	0.5%	1.5%	0.3%	0.0%	0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	21.7%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	20.4%
2000	7.7%	0.1%	0.1%	1.3%	1.0%	0.6%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	25.3%	0.0%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	17.3%
2001	4.3%	0.2%	0.3%	1.9%	0.0%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	15.2%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.2%
2002	7.3%	0.0%	0.8%	5.1%	0.8%	1.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	15.6%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	7.9%
2003	7.7%	0.0%	0.4%	4.5%	0.5%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	24.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	13.6%
2004	5.5%	0.0%	0.3%	2.6%	0.4%	2.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	16.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	4.8%
2005	11.4%	0.0%	0.3%	6.0%	1.5%	4.8%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	19.9%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%
2006	6.7%	0.0%	0.0%	4.9%	2.3%	5.2%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	23.1%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	11.6%
2007	9.9%	0.1%	0.9%	4.7%	2.2%	1.5%	0.4%	0.0%	0.3%	0.0%	0.0%	0.0%	27.7%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	17.7%
1983-2007	5.8%	0.3%	0.2%	4.3%	0.5%	6.0%	0.3%	0.0%	0.0%	0.5%	0.5%	0.0%	27.9%	0.0%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%	8.3%
1979-1984	5.8%	0.4%	0.3%	9.5%	0.1%	14.2%	0.1%	0.0%	0.0%	1.6%	1.8%	0.0%	33.7%	0.0%	1.2%	0.5%	0.1%	0.0%	0.0%	0.3%	30.4%
1985-1995	2.9%	0.5%	0.1%	3.5%	0.2%	7.9%	0.4%	0.0%	0.0%	0.6%	0.6%	0.0%	31.4%	0.0%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%	7.7%
1996-1998	11.0%	0.1%	0.0%	2.4%	0.4%	0.5%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	27.6%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	8.8%
1999-2007	7.7%	0.0%	0.4%	3.6%	1.0%	1.9%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	21.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	12.4%

**Appendix C.75. Percent distribution of Elwha River reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1986	24.4%	1.7%	0.0%	2.3%	0.5%	17.7%	0.9%	0.8%	6.4%	0.8%	6.3%	0.0%	0.9%	0.0%	0.0%	12.2%	13.5%	0.0%	0.2%	0.0%	11.4%
1987	14.6%	0.0%	0.0%	4.5%	2.0%	14.1%	2.5%	1.2%	8.9%	2.2%	5.7%	0.0%	3.0%	0.2%	0.0%	6.5%	18.6%	0.0%	0.0%	0.0%	15.9%
1988	5.4%	0.5%	0.5%	3.7%	2.3%	13.8%	6.1%	0.0%	0.0%	1.4%	1.2%	0.0%	4.4%	0.0%	0.0%	8.2%	8.4%	0.0%	4.0%	0.0%	40.2%
1989	6.1%	1.8%	0.0%	4.7%	2.2%	5.8%	0.0%	0.0%	0.0%	3.2%	0.0%	0.0%	2.9%	0.0%	0.4%	9.4%	12.9%	0.0%	2.2%	0.0%	48.6%
1990	0.0%	0.0%	0.0%	12.8%	0.0%	15.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.1%	10.3%	0.0%	5.1%	0.0%	51.3%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%	0.0%	7.1%	0.0%	7.1%	0.0%	0.0%	71.4%	0.0%	0.0%	0.0%	0.0%	0.0%
1992	1.7%	0.0%	0.0%	0.0%	0.0%	43.1%	3.4%	0.0%	0.0%	0.0%	8.6%	0.0%	17.2%	0.0%	0.0%	0.0%	22.4%	0.0%	0.0%	0.0%	3.4%
1993	9.3%	0.0%	0.0%	0.0%	0.0%	14.0%	11.6%	1.6%	10.9%	0.0%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	28.7%	0.0%	3.1%	0.0%	17.8%
1994	3.9%	0.0%	0.0%	9.2%	0.0%	17.1%	0.0%	3.9%	2.6%	0.0%	7.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	55.3%
1995	0.0%	0.0%	0.0%	0.0%	2.6%	26.5%	2.6%	0.0%	0.0%	2.6%	6.0%	0.0%	1.7%	0.0%	0.0%	0.9%	10.3%	0.0%	0.0%	0.0%	47.0%
1996	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	3.1%	0.0%	2.4%	0.0%	0.7%	0.0%	0.0%	0.0%	6.2%	0.0%	0.0%	0.0%	80.8%
1997	13.6%	0.0%	0.0%	1.6%	0.0%	5.4%	0.0%	0.0%	6.5%	0.0%	3.8%	0.0%	1.1%	0.0%	0.0%	0.0%	11.4%	0.0%	0.0%	0.0%	56.5%
1983-1997	6.9%	0.3%	0.0%	3.2%	0.8%	15.6%	2.5%	0.6%	3.2%	0.9%	4.1%	0.0%	3.5%	0.0%	0.0%	9.5%	11.9%	0.0%	1.2%	0.0%	35.7%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	6.6%	0.4%	0.0%	3.7%	1.0%	18.2%	2.7%	0.8%	2.9%	1.0%	4.3%	0.0%	4.0%	0.0%	0.0%	11.4%	12.5%	0.0%	1.5%	0.0%	29.1%
1996-1998	8.5%	0.0%	0.0%	0.8%	0.0%	2.7%	1.7%	0.0%	4.8%	0.0%	3.1%	0.0%	0.9%	0.0%	0.0%	0.0%	8.8%	0.0%	0.0%	0.0%	68.6%
1999-2007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

**Appendix C.76. Percent distribution of Elwha River total fishing mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WV/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1986	24.7%	3.3%	0.0%	2.5%	0.7%	17.2%	1.1%	0.8%	5.9%	1.0%	5.9%	0.0%	1.1%	0.0%	0.0%	11.0%	14.7%	0.0%	0.1%	0.0%	10.0%
1987	16.4%	0.0%	0.0%	5.0%	1.9%	15.7%	2.3%	1.3%	8.2%	2.5%	5.0%	0.0%	2.9%	0.2%	0.0%	5.7%	19.5%	0.0%	0.0%	0.0%	13.4%
1988	5.8%	1.1%	0.6%	3.9%	2.4%	15.5%	6.0%	0.0%	0.0%	1.5%	1.3%	0.0%	4.5%	0.0%	0.0%	7.8%	8.8%	0.0%	3.7%	0.0%	37.1%
1989	6.7%	5.0%	0.0%	4.7%	2.0%	5.7%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	2.7%	0.0%	0.3%	8.7%	14.0%	0.0%	2.0%	0.0%	45.2%
1990	0.0%	0.0%	0.0%	12.2%	0.0%	17.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.9%	12.2%	0.0%	4.9%	0.0%	48.8%
1991	3.6%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%	0.0%	3.6%	0.0%	7.1%	0.0%	0.0%	50.0%	10.7%	0.0%	0.0%	0.0%	0.0%
1992	3.7%	0.0%	0.0%	1.2%	0.0%	37.8%	3.7%	1.2%	1.2%	0.0%	7.3%	0.0%	13.4%	0.0%	0.0%	0.0%	28.0%	0.0%	0.0%	0.0%	2.4%
1993	12.7%	0.0%	0.0%	0.0%	0.0%	15.2%	10.1%	2.5%	11.4%	0.0%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	28.5%	0.0%	2.5%	0.0%	14.6%
1994	9.2%	0.0%	0.0%	9.2%	0.0%	18.4%	0.0%	4.6%	2.3%	0.0%	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	48.3%
1995	0.0%	0.0%	0.0%	0.0%	3.2%	32.5%	2.6%	0.0%	0.0%	3.9%	6.5%	0.0%	1.3%	0.0%	0.0%	0.6%	13.6%	0.0%	0.0%	0.0%	35.7%
1996	4.5%	0.0%	0.0%	1.3%	0.0%	1.6%	3.5%	0.0%	3.5%	0.0%	2.9%	0.0%	0.6%	0.0%	0.0%	0.0%	7.3%	0.0%	0.0%	0.0%	74.8%
1997	15.0%	0.0%	0.5%	2.0%	0.0%	5.5%	0.0%	0.0%	6.5%	0.0%	4.0%	0.0%	1.0%	0.0%	0.0%	0.0%	13.5%	0.0%	0.0%	0.0%	52.0%
1983-1997	8.5%	0.8%	0.1%	3.5%	0.8%	17.3%	2.4%	0.9%	3.2%	1.0%	3.7%	0.0%	3.1%	0.0%	0.0%	7.4%	14.2%	0.0%	1.1%	0.0%	31.9%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	8.3%	0.9%	0.1%	3.9%	1.0%	20.0%	2.6%	1.0%	2.9%	1.2%	3.8%	0.0%	3.6%	0.0%	0.0%	8.9%	15.0%	0.0%	1.3%	0.0%	25.5%
1996-1998	9.7%	0.0%	0.3%	1.6%	0.0%	3.5%	1.8%	0.0%	5.0%	0.0%	3.4%	0.0%	0.6%	0.0%	0.0%	0.0%	10.4%	0.0%	0.0%	0.0%	63.4%
1999-2007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

**Appendix C.77. Percent distribution of Squaxin Pen Fall Yearling reported catch among fisheries and escapement.**

Catch Year	AASIM							ISIM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WVOR coast			Puget Sound		Terminal			
	Trawl	Net	Sport	Trawl	Sport	Trawl	Sport	Trawl	Sport	Trawl	Net	Sport	Trawl	Net	Sport	Net	Sport	Trawl	Net	Sport	
1990	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	0.6%	0.0%	0.7%	0.0%	1.3%	0.0%	4.0%	0.0%	0.4%	32.1%	54.5%	0.0%	0.6%	0.0%	2.5%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	0.0%	0.5%	1.1%	0.0%	0.6%	0.0%	8.8%	0.0%	0.4%	32.8%	48.1%	0.0%	0.0%	0.0%	3.5%
1992	0.0%	0.0%	0.0%	0.0%	0.5%	2.3%	0.8%	0.7%	2.7%	0.0%	1.6%	0.0%	7.1%	0.0%	0.5%	21.2%	56.6%	0.0%	1.1%	0.0%	4.7%
1993	0.0%	0.0%	0.0%	0.0%	0.0%	9.7%	2.3%	0.0%	5.4%	0.0%	2.3%	0.0%	13.5%	0.0%	0.6%	2.3%	49.3%	0.0%	1.1%	0.0%	13.5%
1994	0.0%	0.0%	0.0%	0.0%	0.0%	24.7%	4.7%	0.0%	5.9%	0.0%	3.5%	0.0%	6.5%	0.0%	0.0%	22.4%	10.6%	0.0%	0.0%	0.0%	21.6%
1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	47.5%	30.5%	0.0%	0.0%	0.0%	22.0%
1996	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	4.4%	69.8%	0.0%	0.3%	0.0%	2.5%
1997	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	6.0%	65.2%	0.0%	0.0%	0.0%	0.6%
1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	1.9%	91.3%	0.0%	1.0%	0.0%	2.9%
1999	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	62.5%	0.0%	0.0%	0.0%	25.0%
1993-1999	0.0%	0.0%	0.0%	0.0%	0.1%	6.0%	0.6%	0.1%	1.6%	0.0%	0.9%	0.0%	4.7%	0.0%	0.2%	17.3%	57.6%	0.0%	0.4%	0.0%	9.9%
1995-1995	0.0%	0.0%	0.0%	0.0%	0.1%	7.4%	1.4%	0.2%	2.6%	0.0%	1.6%	0.0%	6.7%	0.0%	0.3%	26.4%	41.6%	0.0%	0.5%	0.0%	11.3%
1996-1998	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	4.6%	66.6%	0.0%	0.4%	0.0%	2.0%

**Appendix C.78. Percent distribution of Squaxin Pens Fall Yearling total mortalities among fisheries and escapement.**

Catch Year	AASIM							ISIM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WVOR coast			Puget Sound		Terminal			
	Trawl	Net	Sport	Trawl	Sport	Trawl	Sport	Trawl	Sport	Trawl	Net	Sport	Trawl	Net	Sport	Net	Sport	Trawl	Net	Sport	
1990	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	0.6%	0.1%	0.7%	0.0%	1.1%	0.0%	4.1%	0.0%	0.4%	31.1%	56.2%	0.0%	0.5%	0.1%	2.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%	0.0%	0.5%	1.1%	0.0%	0.9%	0.0%	8.9%	0.0%	0.3%	30.8%	50.5%	0.0%	0.0%	0.0%	3.0%
1992	0.0%	0.0%	0.0%	0.0%	0.4%	2.0%	0.6%	0.6%	2.4%	0.0%	1.2%	0.0%	6.0%	0.0%	0.4%	21.2%	60.6%	0.0%	0.9%	0.0%	3.5%
1993	0.0%	0.0%	0.0%	0.0%	0.0%	10.7%	2.0%	0.0%	5.9%	0.0%	2.0%	0.0%	13.0%	0.0%	0.5%	2.5%	50.4%	0.0%	1.0%	0.0%	12.0%
1994	0.0%	0.0%	0.0%	0.0%	0.0%	23.3%	4.6%	0.0%	5.6%	0.0%	4.2%	0.0%	6.3%	0.0%	0.0%	20.6%	15.3%	0.0%	0.0%	0.0%	19.6%
1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.4%	71.1%	0.0%	0.0%	0.0%	5.7%
1996	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	5.0%	90.0%	0.0%	0.2%	0.0%	2.0%
1997	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	6.4%	66.0%	0.0%	0.0%	0.0%	0.4%
1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	1.6%	93.0%	0.0%	0.6%	0.0%	2.3%
1999	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.5%	93.9%	0.0%	0.0%	0.0%	2.0%
1993-1999	0.0%	0.0%	0.0%	0.0%	0.0%	4.9%	0.6%	0.1%	1.9%	0.0%	0.9%	0.0%	4.5%	0.0%	0.2%	14.2%	66.9%	0.0%	0.3%	0.0%	5.3%
1995-1995	0.0%	0.0%	0.0%	0.0%	0.1%	7.3%	1.3%	0.2%	2.7%	0.0%	1.5%	0.0%	6.4%	0.0%	0.3%	21.4%	50.7%	0.0%	0.4%	0.0%	7.6%
1996-1998	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	4.3%	90.4%	0.0%	0.3%	0.0%	1.6%

**Appendix C.79. Percent distribution of Nooksack Spring Fingerling reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.9%	0.0%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	84.8%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.8%	6.9%	0.0%	0.0%	0.0%	73.3%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.6%	0.0%	14.6%	0.0%	2.4%	0.0%	0.0%	4.9%	34.1%	0.0%	0.0%	0.0%	29.3%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	7.0%	0.0%	32.6%	0.0%	6.3%	0.0%	2.1%	0.0%	0.0%	7.0%	5.3%	0.0%	1.4%	0.0%	36.1%
1992	0.4%	0.4%	0.0%	0.0%	0.4%	17.5%	2.3%	1.3%	11.0%	0.9%	1.6%	0.0%	0.9%	0.0%	0.0%	0.4%	7.8%	0.0%	0.0%	0.0%	55.2%
1993	0.0%	0.0%	0.0%	0.0%	0.0%	4.4%	7.6%	2.3%	12.5%	0.0%	6.5%	0.0%	0.8%	0.0%	0.0%	5.3%	11.5%	0.0%	0.0%	0.0%	49.2%
1994	0.6%	0.0%	0.0%	0.0%	0.0%	5.1%	0.0%	6.1%	28.2%	0.0%	1.0%	0.0%	0.2%	0.0%	0.0%	6.3%	3.3%	0.0%	0.0%	0.0%	40.3%
1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	7.0%	0.0%	0.0%	0.0%	67.3%
1996	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	3.2%	0.0%	12.4%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	3.2%	0.0%	0.0%	0.0%	79.6%
1997	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	14.2%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	3.5%	15.9%	0.0%	0.0%	0.0%	58.4%
1998	0.0%	0.0%	0.0%	0.0%	3.5%	0.0%	6.1%	0.0%	15.8%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%	1.8%	5.3%	0.0%	2.6%	0.0%	59.6%
1999	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	1.0%	0.0%	23.6%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	1.5%	1.0%	0.0%	3.1%	0.0%	64.6%
1983-1999	0.1%	0.0%	0.0%	0.0%	0.4%	2.6%	2.7%	0.8%	16.9%	0.1%	3.6%	0.0%	0.8%	0.0%	0.0%	3.9%	8.6%	0.0%	0.6%	0.0%	58.9%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0.1%	0.0%	0.0%	0.0%	0.0%	3.6%	2.1%	1.2%	17.1%	0.1%	4.3%	0.0%	0.8%	0.0%	0.0%	5.1%	9.7%	0.0%	0.2%	0.0%	55.6%
1996-1998	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	4.9%	0.0%	14.1%	0.0%	2.6%	0.0%	0.2%	0.0%	0.0%	1.8%	8.1%	0.0%	0.9%	0.0%	65.9%
1999-2007	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	1.0%	0.0%	23.6%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	1.5%	1.0%	0.0%	3.1%	0.0%	64.6%



**Appendix C.80. Percent distribution of Nooksack Spring Fingerling total mortalities among fisheries and escapement.**

Catch Year	AASM							SBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WV/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1988	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.8%	2.5%	9.2%	0.4%	4.6%	0.0%	0.4%	0.0%	0.0%	8.0%	3.8%	0.0%	0.0%	0.0%	68.1%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.5%	8.9%	0.0%	0.0%	0.0%	68.5%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	8.5%	1.4%	0.0%	26.8%	1.4%	12.7%	0.0%	1.4%	0.0%	0.0%	2.8%	28.2%	0.0%	0.0%	0.0%	16.9%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	6.8%	0.0%	36.9%	0.0%	6.3%	0.0%	2.4%	0.0%	0.0%	6.5%	6.8%	0.0%	1.2%	0.0%	30.7%
1992	2.0%	0.9%	0.0%	0.0%	0.4%	19.5%	2.3%	1.7%	12.0%	1.0%	1.6%	0.0%	1.0%	0.0%	0.0%	0.4%	9.7%	0.0%	0.0%	0.0%	47.4%
1993	0.0%	0.0%	0.0%	0.0%	0.0%	4.8%	7.7%	3.3%	14.3%	0.0%	6.2%	0.0%	0.8%	0.0%	0.0%	5.1%	12.3%	0.0%	0.0%	0.0%	45.6%
1994	0.8%	0.0%	0.0%	0.0%	0.0%	5.1%	0.0%	6.0%	29.8%	0.0%	0.9%	0.0%	0.2%	0.0%	0.0%	6.0%	3.8%	0.0%	0.0%	0.0%	47.5%
1995	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	24.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	3.1%	12.0%	0.0%	0.0%	0.0%	59.9%
1996	0.0%	0.0%	0.0%	0.0%	1.0%	0.5%	3.5%	0.0%	14.6%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	5.5%	0.0%	0.0%	0.0%	74.4%
1997	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.5%	0.0%	15.6%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	3.1%	21.9%	0.0%	0.0%	0.0%	51.6%
1998	0.0%	0.0%	0.0%	0.0%	4.7%	0.0%	6.3%	0.0%	17.2%	0.0%	6.3%	0.0%	0.0%	0.0%	0.0%	1.6%	8.6%	0.0%	2.3%	0.0%	53.1%
1999	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	1.4%	0.0%	26.1%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	1.4%	1.9%	0.0%	2.9%	0.0%	60.9%
1983-1999	0.2%	0.1%	0.0%	0.0%	0.5%	3.8%	3.0%	1.1%	19.6%	0.2%	3.4%	0.0%	0.8%	0.0%	0.0%	4.4%	10.3%	0.0%	0.5%	0.0%	52.0%
1979-1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985-1995	0.3%	0.1%	0.0%	0.0%	0.1%	5.3%	2.4%	1.7%	20.2%	0.4%	4.1%	0.0%	0.6%	0.0%	0.0%	5.8%	10.7%	0.0%	0.1%	0.0%	48.1%
1996-1998	0.0%	0.0%	0.0%	0.0%	1.9%	0.2%	5.1%	0.0%	15.8%	0.0%	2.9%	0.0%	0.2%	0.0%	0.0%	1.6%	12.0%	0.0%	0.8%	0.0%	59.7%
1999-2007	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	1.4%	0.0%	26.1%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	1.4%	1.9%	0.0%	2.9%	0.0%	60.9%

**Appendix C.81. Percent distribution of University of Washington Accelerated reported catch among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1979	0.0%	0.0%	0.0%	0.0%	0.0%	14.6%	0.1%	1.8%	4.4%	0.3%	4.1%	0.0%	1.8%	0.0%	0.5%	6.6%	38.4%	0.0%	0.0%	0.0%	27.5%
1980	0.0%	0.0%	0.0%	0.1%	0.0%	8.9%	0.1%	0.4%	5.0%	0.2%	1.4%	0.0%	1.3%	0.0%	0.0%	12.9%	49.2%	0.0%	0.0%	0.2%	22.4%
1981	0.0%	0.0%	0.0%	0.6%	0.0%	10.2%	0.1%	0.5%	4.9%	0.0%	4.0%	0.0%	2.3%	0.0%	0.3%	11.7%	45.5%	0.0%	0.0%	0.0%	19.9%
1982	0.0%	0.1%	0.0%	0.0%	0.0%	16.7%	0.2%	0.2%	3.7%	0.3%	0.9%	0.0%	2.3%	0.0%	0.4%	12.7%	29.2%	0.0%	1.2%	0.0%	32.0%
1983	0.0%	0.0%	0.0%	0.1%	0.0%	9.8%	0.1%	0.7%	3.1%	1.0%	1.7%	0.0%	1.3%	0.0%	0.2%	19.3%	30.6%	0.0%	4.6%	0.0%	27.4%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	19.0%	0.2%	0.5%	4.4%	0.6%	1.0%	0.0%	1.9%	0.0%	0.0%	20.0%	24.0%	0.0%	3.5%	0.0%	25.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	15.4%	1.3%	0.0%	5.0%	0.0%	5.2%	0.0%	2.2%	0.0%	0.0%	6.1%	23.6%	0.0%	9.1%	0.0%	32.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	18.3%	0.9%	0.0%	3.9%	0.0%	8.2%	0.0%	1.4%	0.0%	0.0%	20.5%	19.1%	0.0%	5.6%	0.0%	22.0%
1987	0.3%	0.0%	0.0%	0.0%	0.0%	10.8%	1.5%	1.4%	4.7%	0.3%	0.3%	0.0%	4.1%	0.0%	0.2%	22.6%	13.7%	0.0%	25.6%	0.0%	14.6%
1983-1987	0.0%	0.0%	0.0%	0.1%	0.0%	13.5%	0.5%	0.6%	4.3%	0.3%	3.0%	0.0%	2.1%	0.0%	0.2%	14.7%	30.4%	0.0%	5.5%	0.0%	24.7%
1979-1984	0.0%	0.0%	0.0%	0.1%	0.0%	12.9%	0.2%	0.7%	4.3%	0.4%	2.2%	0.0%	1.8%	0.0%	0.2%	13.9%	36.2%	0.0%	1.6%	0.0%	25.7%
1985-1995	0.1%	0.0%	0.0%	0.0%	0.0%	14.8%	1.2%	0.5%	4.5%	0.1%	4.6%	0.0%	2.6%	0.0%	0.1%	16.4%	18.8%	0.0%	13.5%	0.0%	22.8%
1996-1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1999-2007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

**Appendix C.82. Percent distribution of University of Washington Accelerated total mortalities among fisheries and escapement.**

Catch Year	AABM							ISBM													Esc.
	SEAK			NBC		WCVI		Geo St		Canada			WA/OR coast			Puget Sound		Terminal			
	Troll	Net	Sport	Troll	Sport	Troll	Sport	Troll	Sport	Troll	Net	Sport	Troll	Net	Sport	Net	Sport	Troll	Net	Sport	
1979	0.0%	0.0%	0.0%	0.0%	0.0%	15.0%	0.1%	1.6%	4.1%	0.3%	3.7%	0.0%	1.8%	0.0%	0.5%	7.0%	42.0%	0.0%	0.0%	0.0%	23.9%
1980	0.0%	0.0%	0.0%	0.1%	0.0%	8.1%	0.1%	0.3%	3.9%	0.2%	1.2%	0.0%	1.5%	0.0%	0.0%	13.1%	55.0%	0.0%	0.0%	0.2%	16.3%
1981	0.0%	0.0%	0.0%	0.6%	0.0%	10.7%	0.1%	0.4%	4.3%	0.0%	3.5%	0.0%	2.2%	0.0%	0.3%	11.1%	50.8%	0.0%	0.0%	0.0%	15.9%
1982	0.0%	0.1%	0.0%	0.0%	0.0%	19.6%	0.2%	0.2%	3.4%	0.3%	0.8%	0.0%	2.5%	0.0%	0.4%	12.9%	31.2%	0.0%	1.1%	0.0%	27.2%
1983	0.0%	0.0%	0.0%	0.1%	0.0%	9.0%	0.1%	0.6%	2.5%	0.9%	1.4%	0.0%	1.2%	0.0%	0.2%	20.6%	39.3%	0.0%	3.7%	0.0%	20.4%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	17.9%	0.2%	0.4%	3.9%	0.5%	1.0%	0.0%	1.8%	0.0%	0.0%	20.0%	30.5%	0.0%	3.1%	0.0%	20.8%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	15.1%	1.2%	0.0%	4.6%	0.0%	5.0%	0.0%	2.1%	0.0%	0.0%	6.5%	29.9%	0.0%	8.3%	0.0%	27.3%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	18.8%	1.0%	0.0%	3.5%	0.0%	7.4%	0.0%	1.6%	0.0%	0.0%	20.6%	24.5%	0.0%	5.0%	0.0%	17.8%
1987	0.5%	0.0%	0.0%	0.0%	0.0%	11.4%	1.5%	1.4%	4.6%	0.3%	0.3%	0.0%	4.4%	0.0%	0.2%	22.1%	14.9%	0.0%	25.0%	0.0%	13.5%
1983-1987	0.1%	0.0%	0.0%	0.1%	0.0%	14.0%	0.5%	0.5%	3.9%	0.3%	2.7%	0.0%	2.1%	0.0%	0.2%	14.9%	35.3%	0.0%	5.1%	0.0%	20.3%
1979-1984	0.0%	0.0%	0.0%	0.1%	0.0%	13.4%	0.1%	0.6%	3.7%	0.4%	1.9%	0.0%	1.8%	0.0%	0.2%	14.1%	41.5%	0.0%	1.3%	0.0%	20.7%
1985-1995	0.2%	0.0%	0.0%	0.0%	0.0%	15.1%	1.2%	0.5%	4.2%	0.1%	4.2%	0.0%	2.7%	0.0%	0.1%	16.4%	23.1%	0.0%	12.8%	0.0%	19.5%
1996-1998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1999-2007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

**Appendix D. CWT (Cohort) release to age 2 survival indices (completed brood years only) and Chinook model-derived age 1 to age 2 survival indices (up to 2002) for exploitation rate indicator stocks. Indices are survival indices relative to base period.**

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Figure D.1. Alaska Spring CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

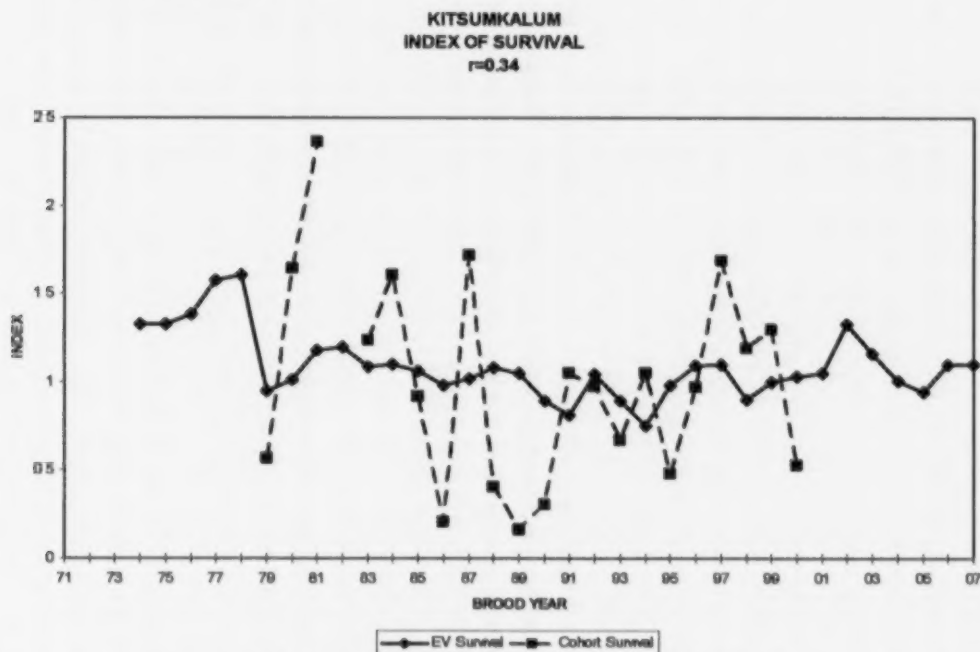


Figure D.2. Kitsumkalum CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).



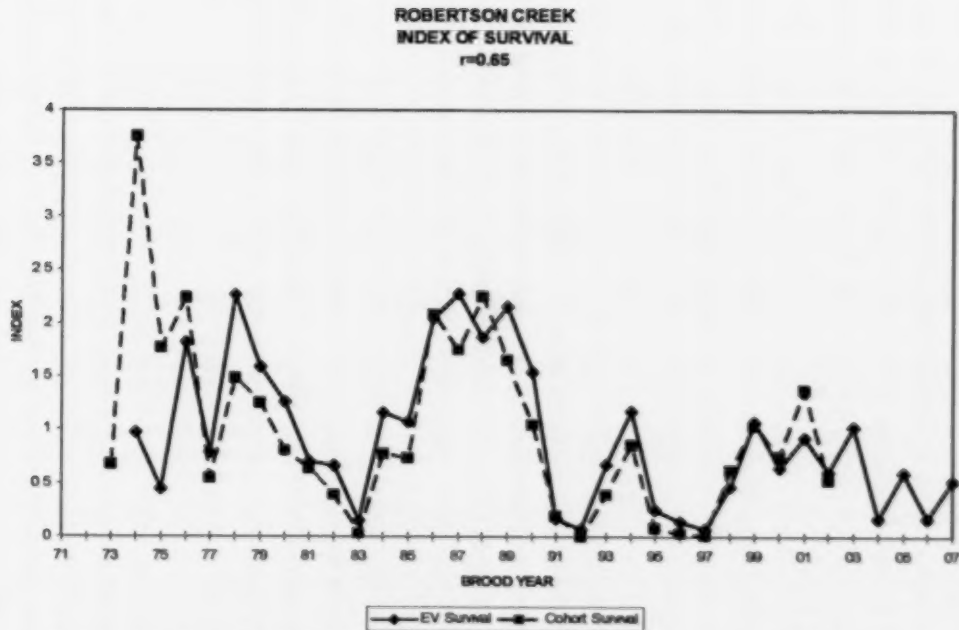


Figure D.3. Robertson Creek CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

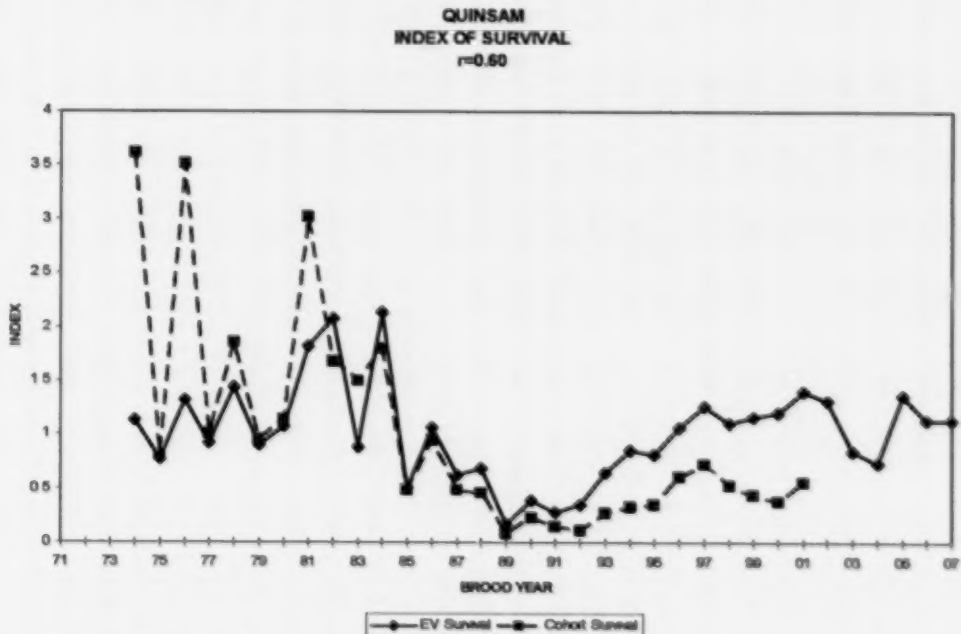


Figure D.4. Quinsam CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

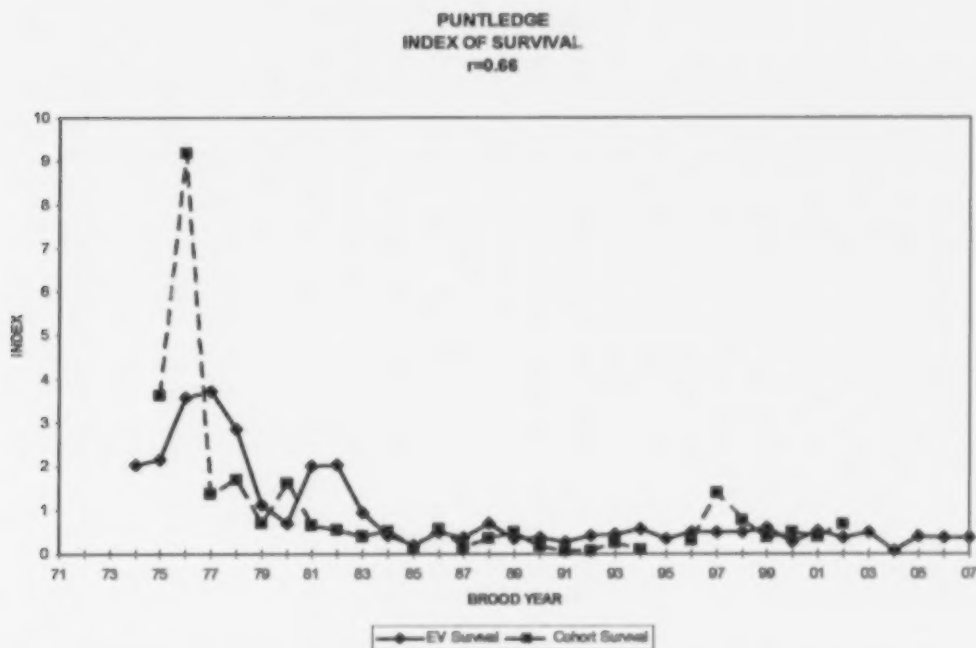


Figure D.5. Puntledge CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

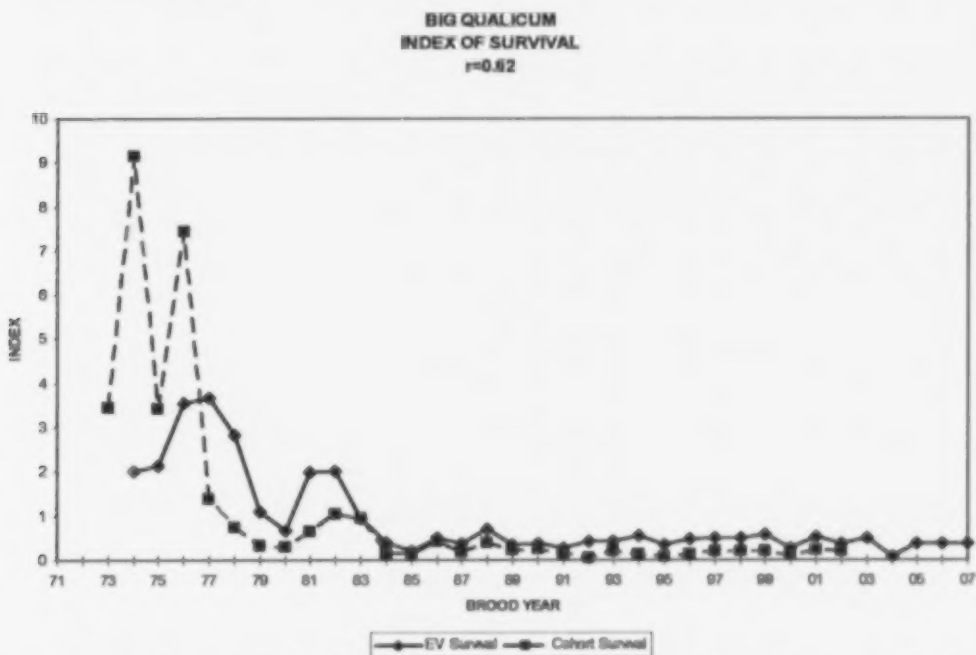


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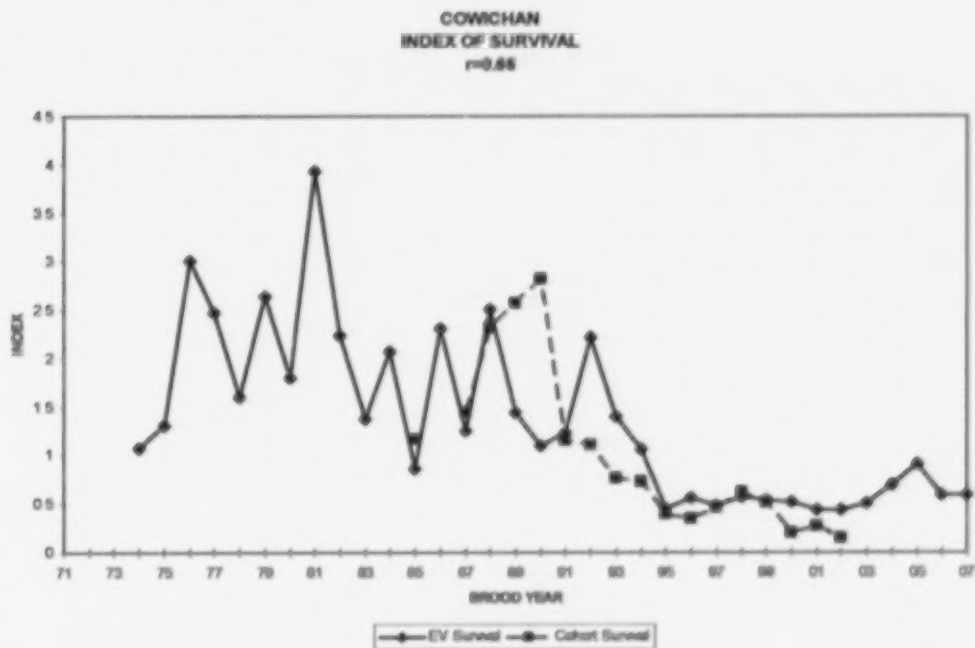


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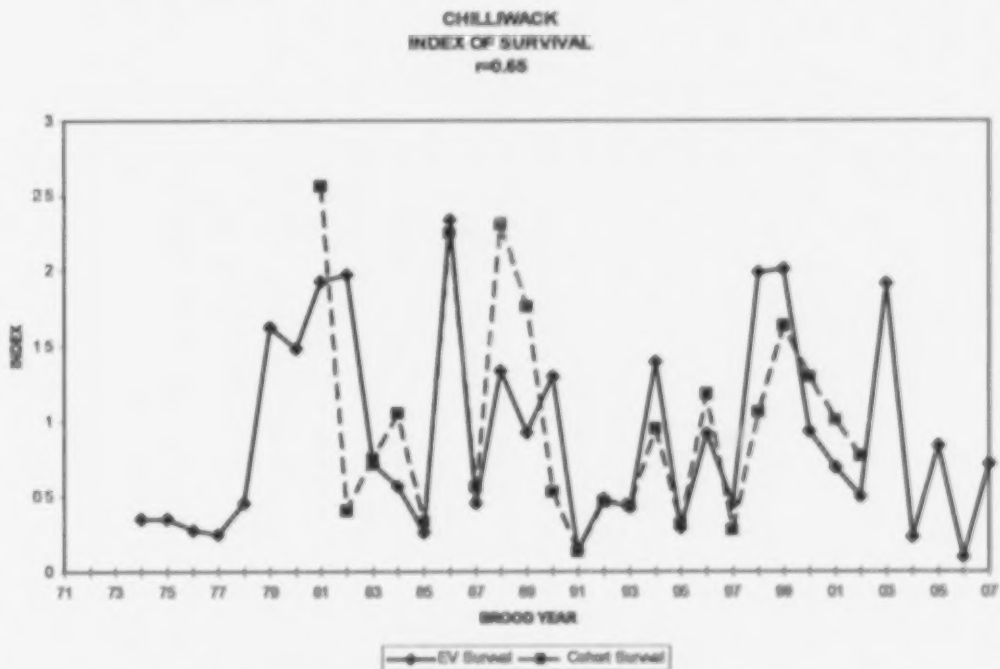


Figure D.8. Chilliwack CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

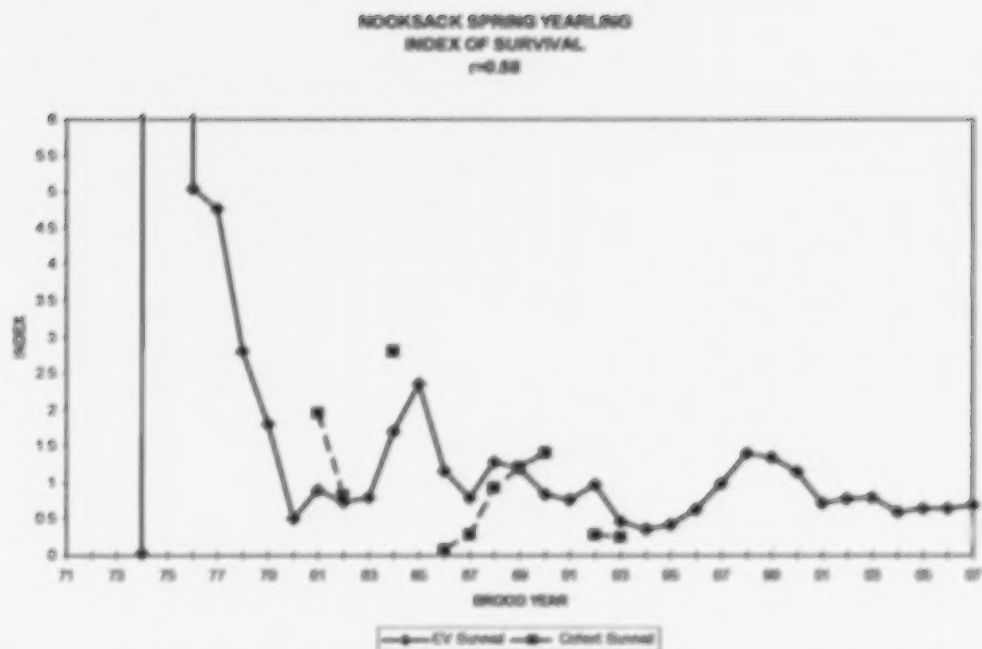
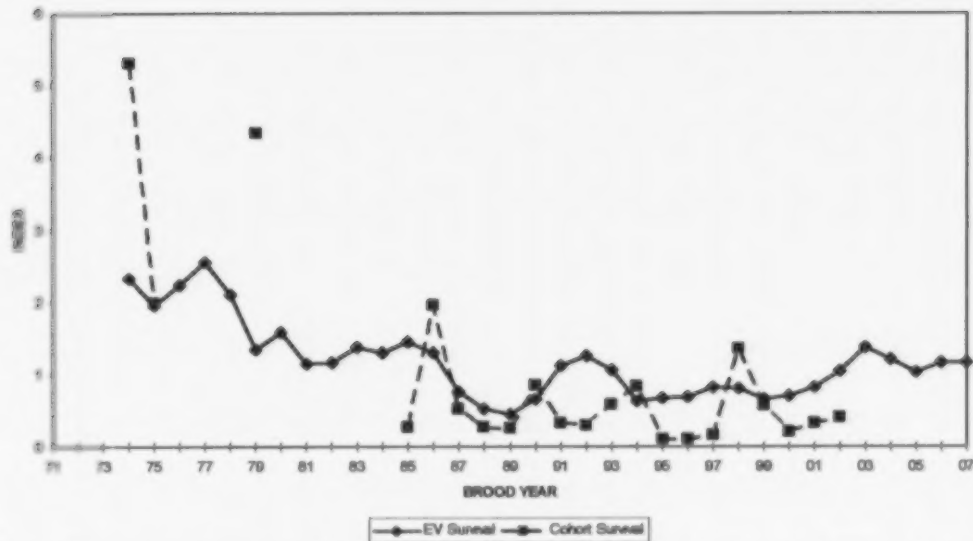


Figure D.9. Nooksack Spring Yearling CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival rates).



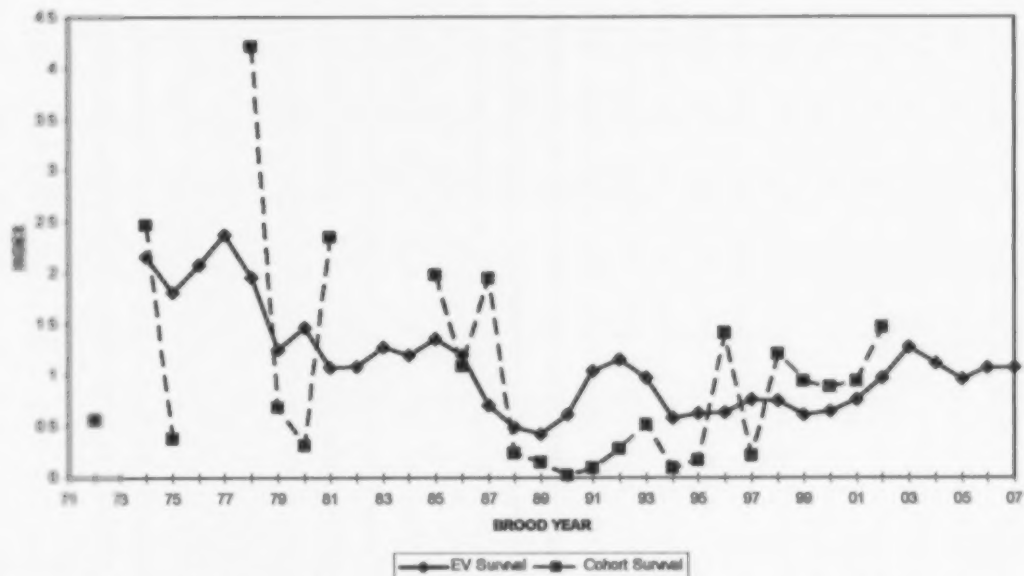
Figure D.10. Skagit Spring Yearling CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

**SAMISH FALL FINGERLING  
INDEX OF SURVIVAL  
 $r=0.73$**



**Figure D.11.** Samish Fall Fingerling CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

**GEORGE ADAMS FALL FINGERLING  
INDEX OF SURVIVAL  
 $r=0.54$**



**Figure D.12.** George Adams Fall Fingerling CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).



SOUTH PUGET SOUND FALL FINGERLING  
INDEX OF SURVIVAL  
 $r=0.47$

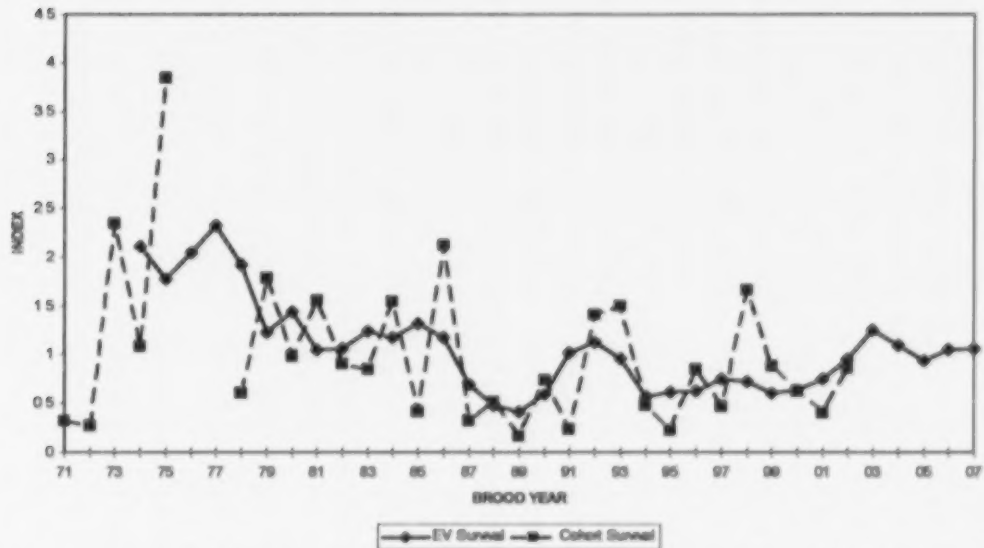


Figure D.13. South Puget Sound Fall Fingerling CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

SOUTH PUGET SOUND FALL YEARLING  
INDEX OF SURVIVAL  
 $r=0.03$

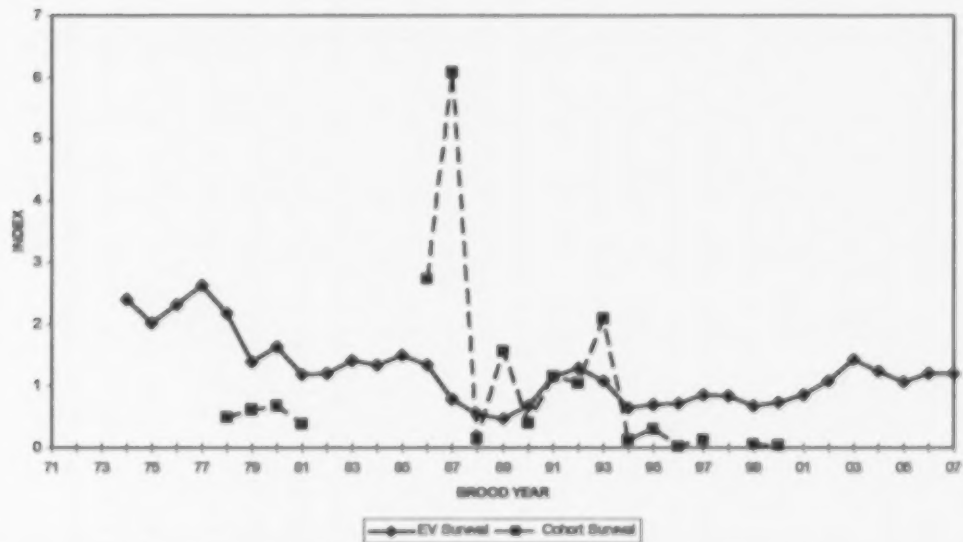


Figure D.14. South Puget Sound Fall Yearling CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).



Figure D.15. Squaxin Pens Fall Yearling CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

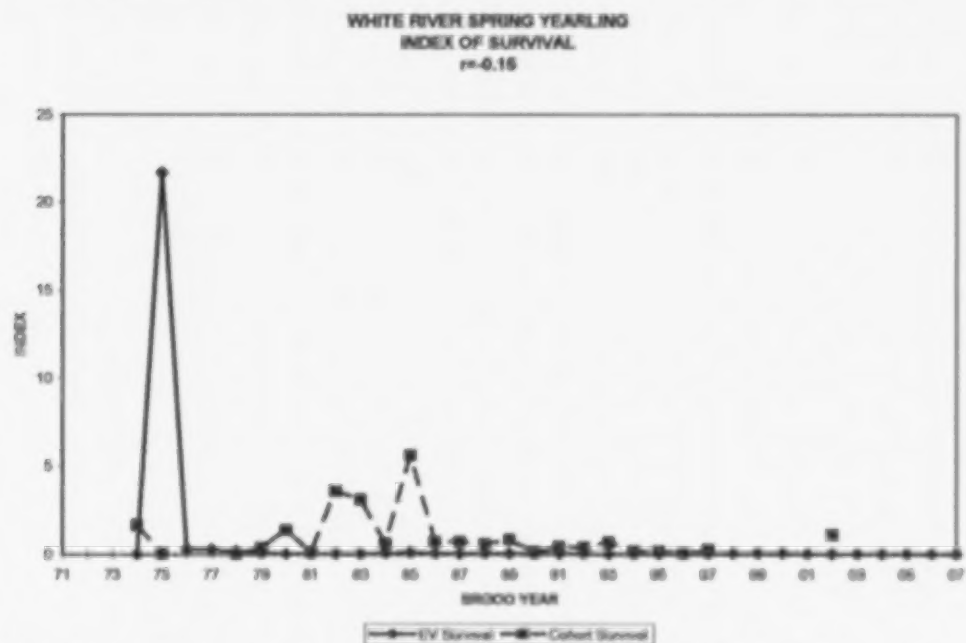


Figure D.16. White River Spring Yearling CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

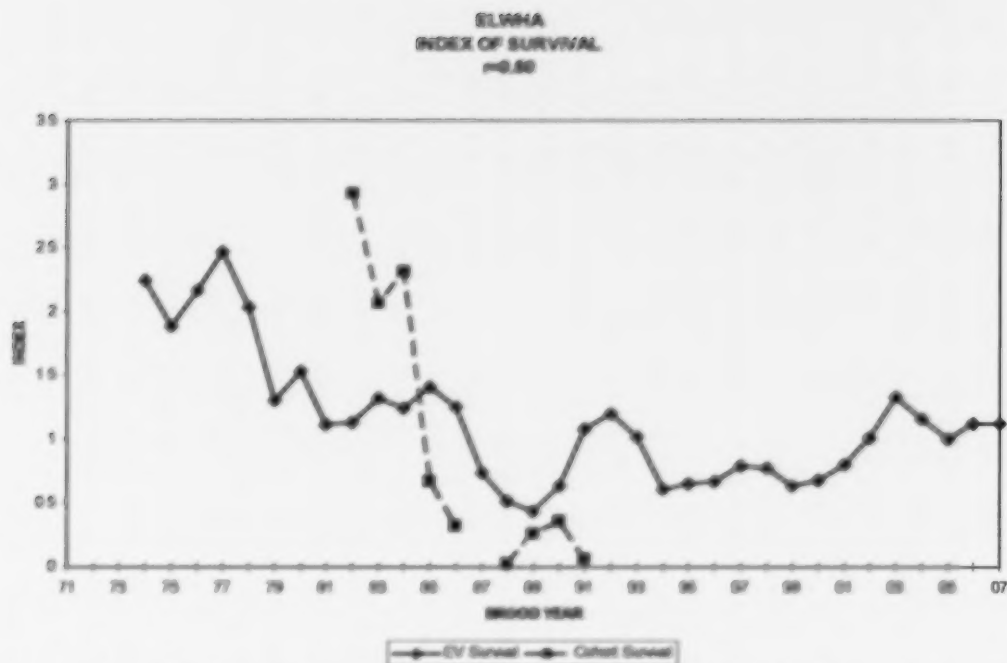


Figure D.17. Elwha Fall Fingerling CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).



Figure D.18. Hoko Fall Fingerling CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

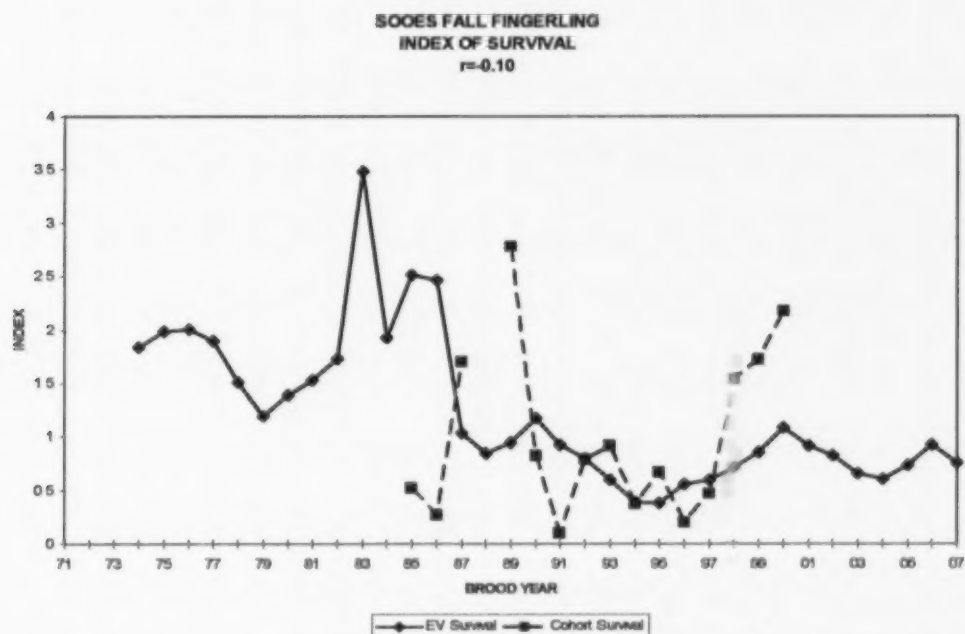


Figure D.19. Sooes Fall Fingerling CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

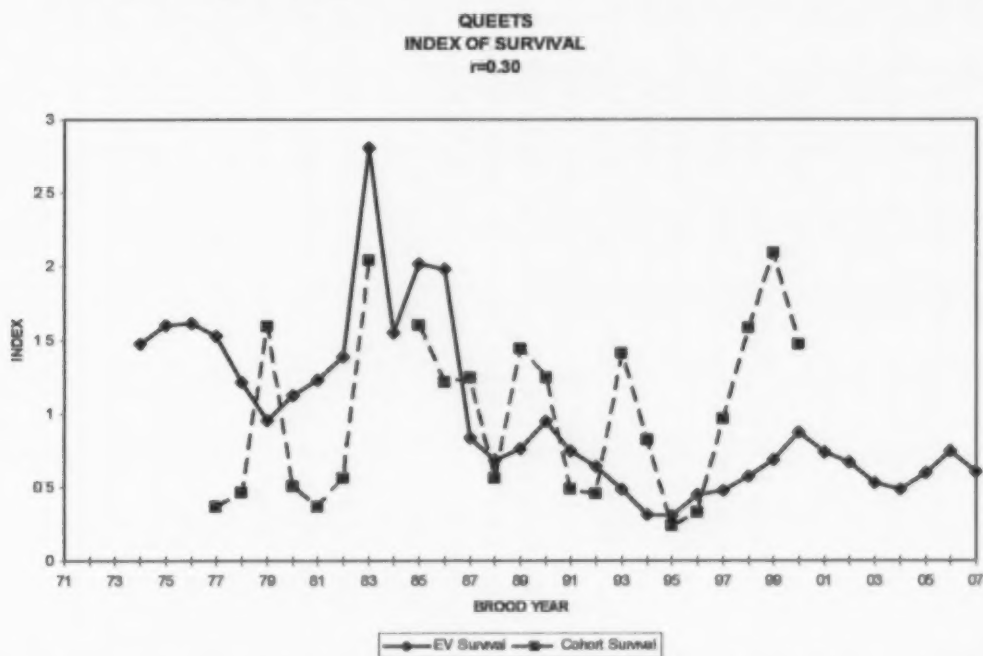


Figure D.20. Queets Fall Fingerling CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

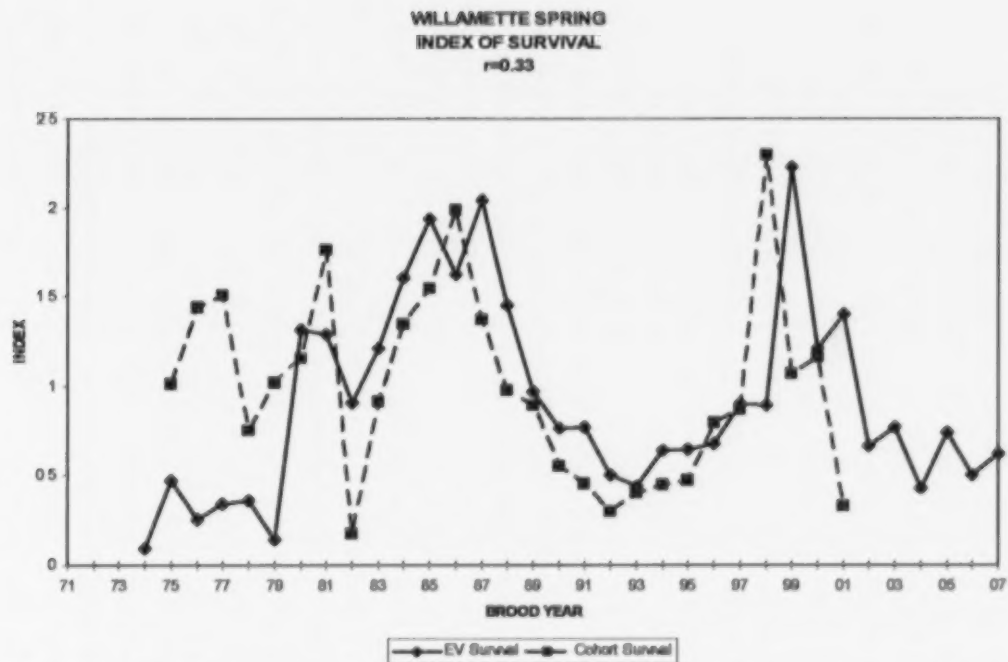


Figure D.21. Willamette Spring CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).



Figure D.22. Columbia River Summers CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices)



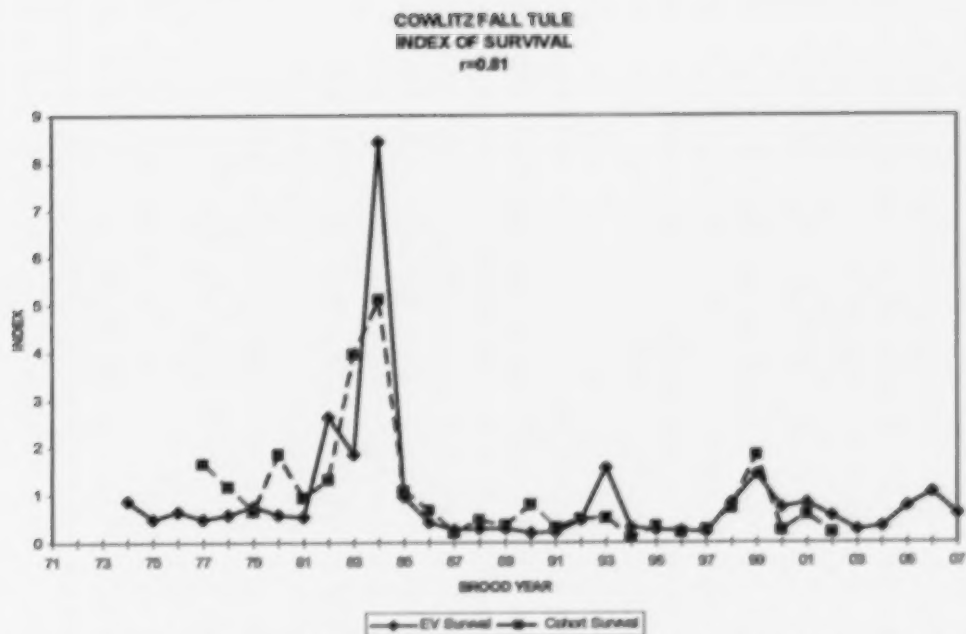


Figure D.23. Cowlitz Fall Tule CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

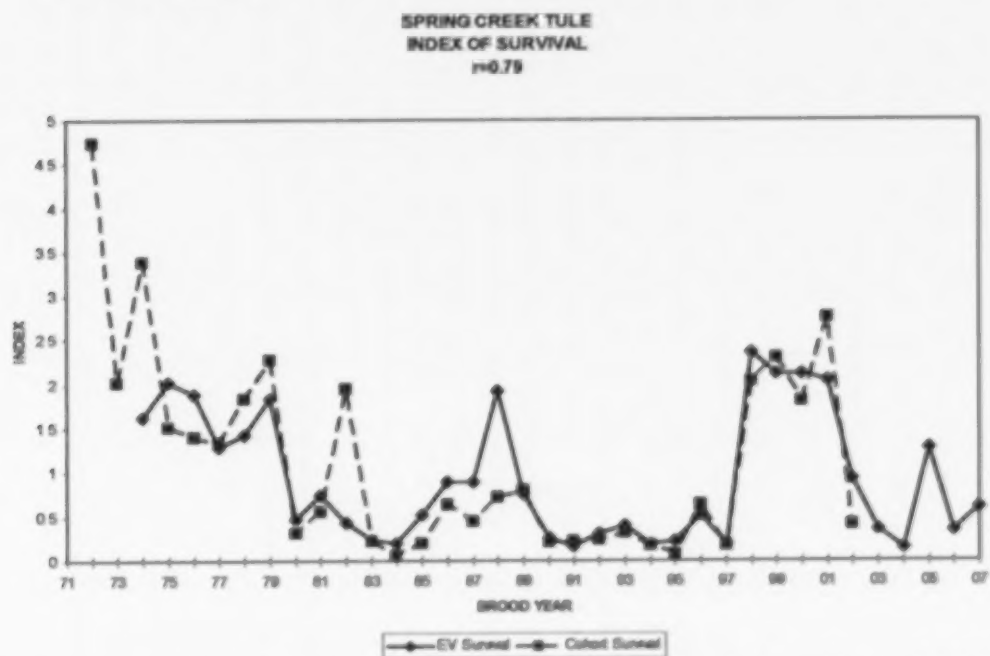
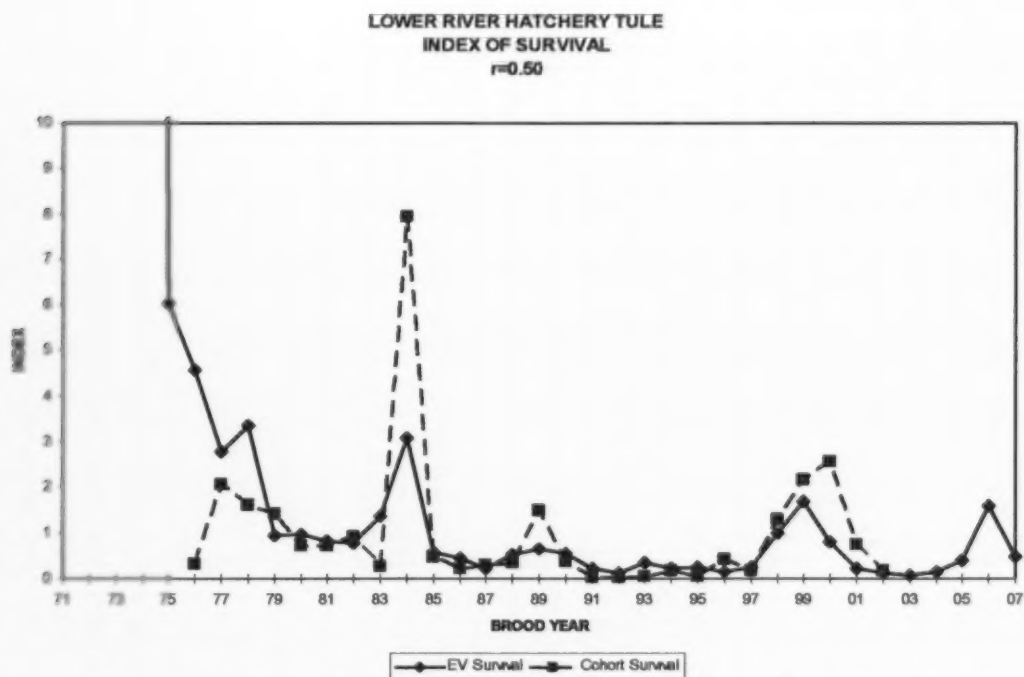
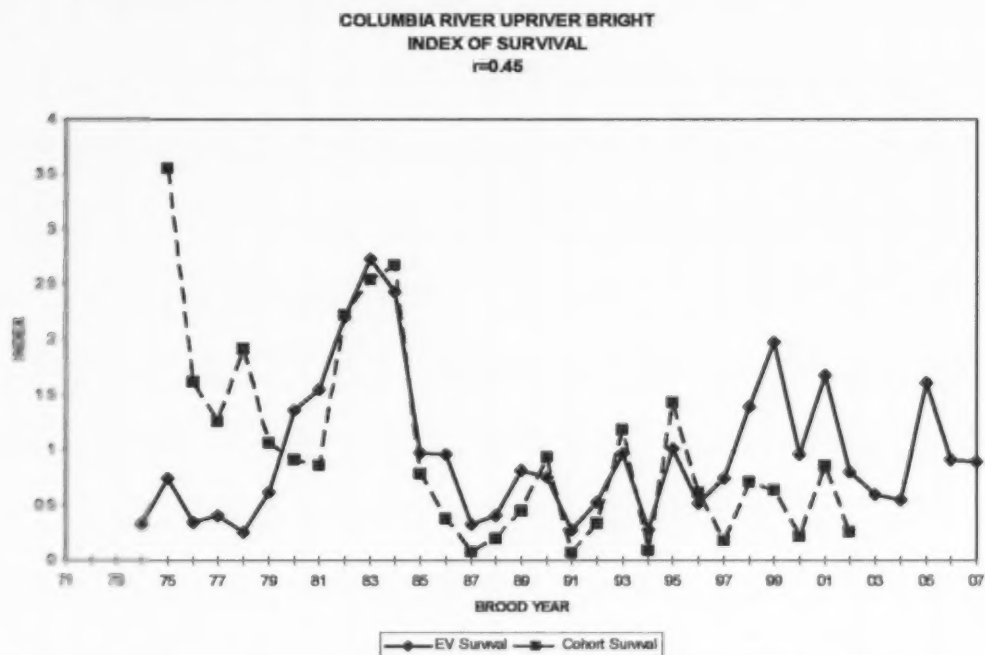


Figure D.24. Spring Creek Tule CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).



**Figure D.25. Columbia Lower River Hatchery Tule CWT (cohort) and model age 2 survival indices**  
( $r$ =correlation between survival indices).



**Figure D.26. Columbia River Upriver Brights CWT (cohort) and model age 2 survival indices**  
( $r$ =correlation between survival indices).

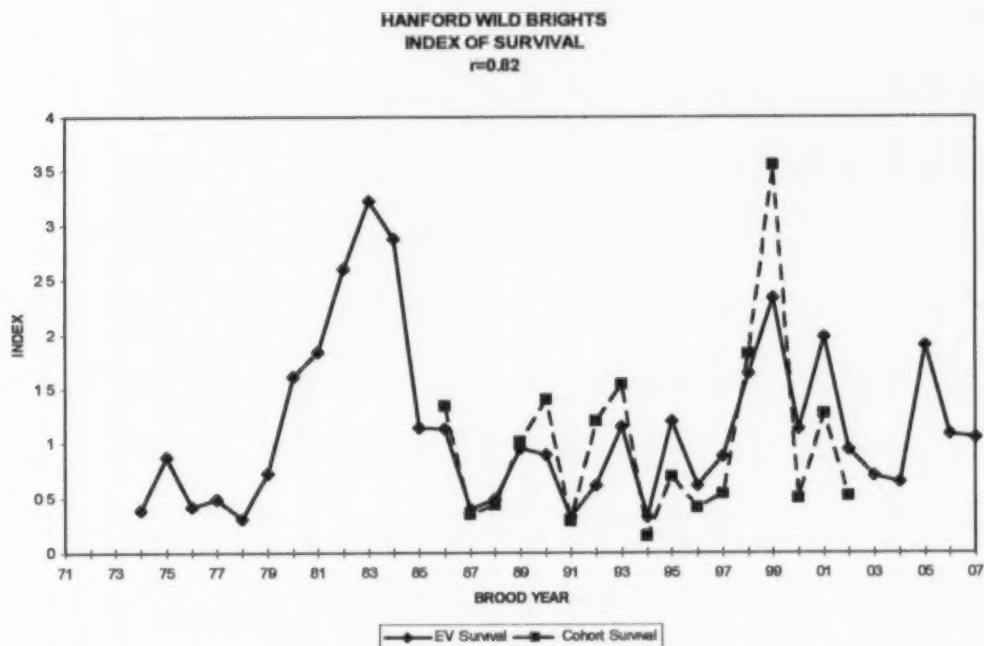


Figure D.27. Hanford Wild Brights CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

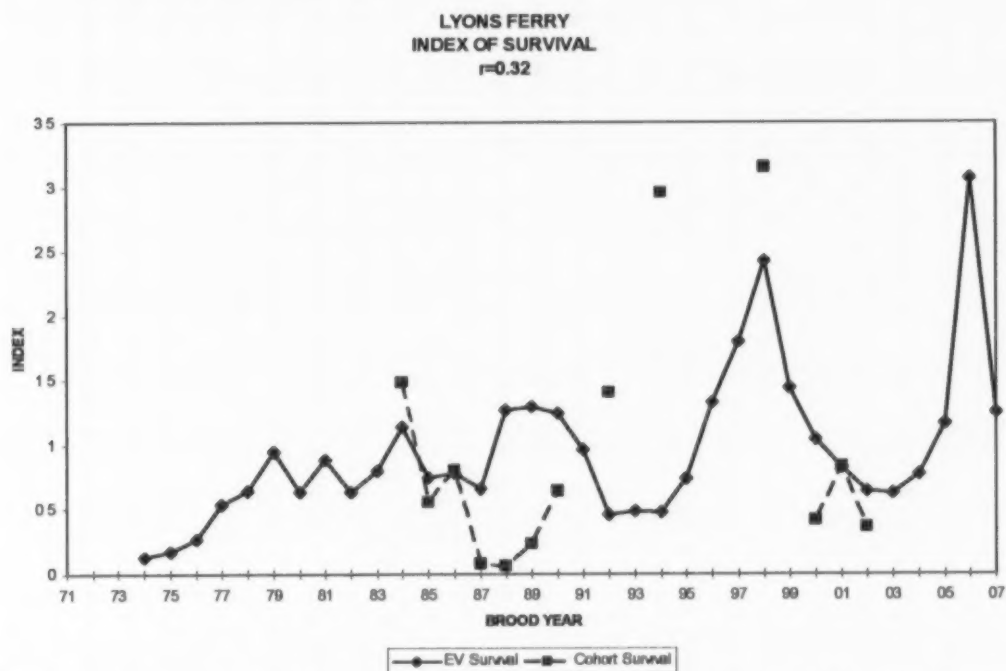


Figure D.28. Lyons Ferry Fall Hatchery CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

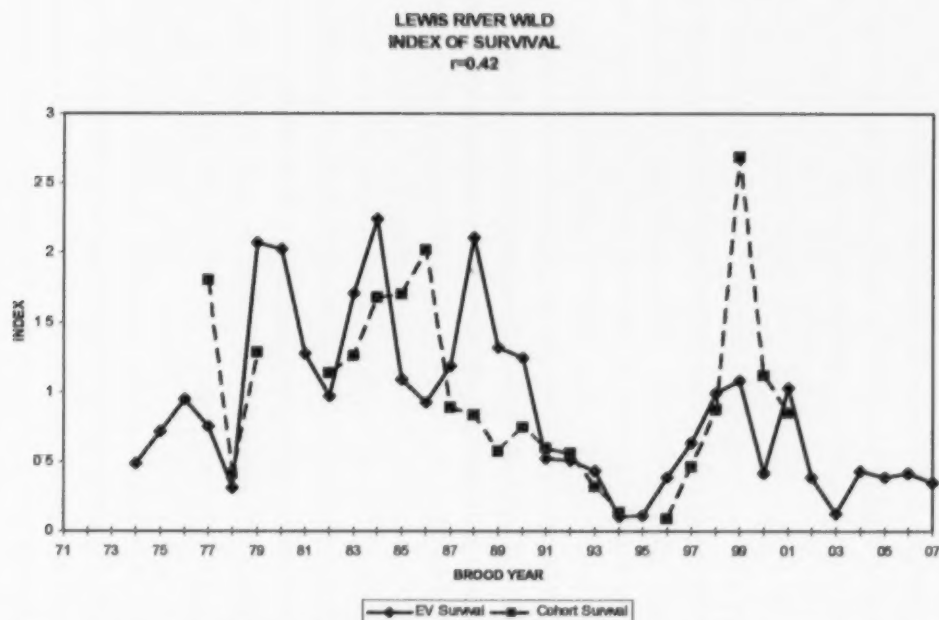


Figure D.29. Lewis River Wild CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

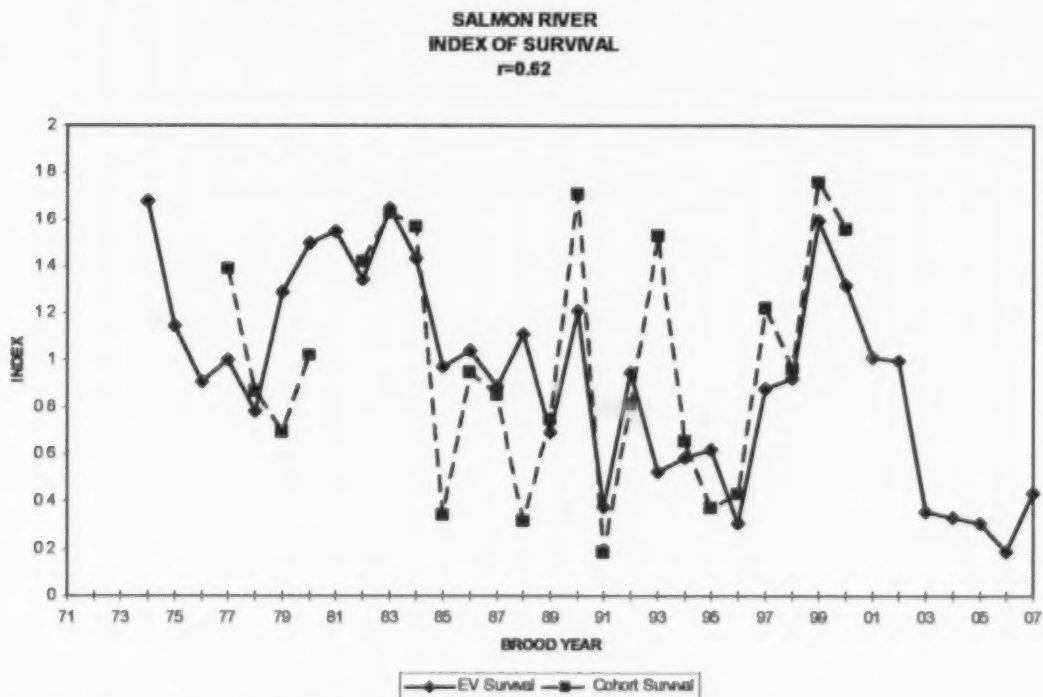


Figure D.30. Salmon River (NOC) CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).

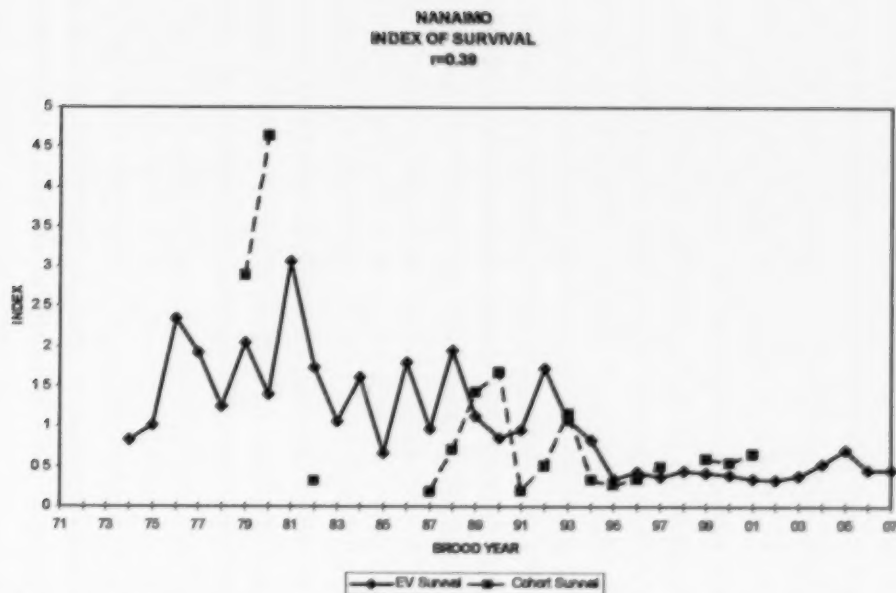


Figure D.31. Nanaimo River CWT (cohort) and model age 2 survival indices ( $r$ =correlation between survival indices).



**Appendix E. Total mortality and landed catch exploitation rates<sup>1</sup> for exploitation rate indicator stocks<sup>2</sup> for complete broods up to 2002.**

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<sup>1</sup> Ocean exploitation rates based only on ocean fisheries are shown for stocks in which terminal fisheries differentially impact the coded-wire tagged indicator compared to the associated wild stock. Total exploitation rates based on ocean plus terminal fisheries are shown for stocks in which fishery impacts on the indicator and the associated wild stock are similar in terminal areas. Exploitation rates are not shown for the following hatchery stocks because they are not associated with a wild stock: University of Washington Accelerated, South Puget Sound Fall Yearling, Squaxin Pens Fall Yearling. Exploitation rates cannot be calculated for the following stocks without sufficient escapement data: Nisqually Fall Fingerling, White River Spring Yearling, Elwha Fall Fingerling.

<sup>2</sup> The corresponding stocks used in the Chinook model calibration are indicated in brackets.

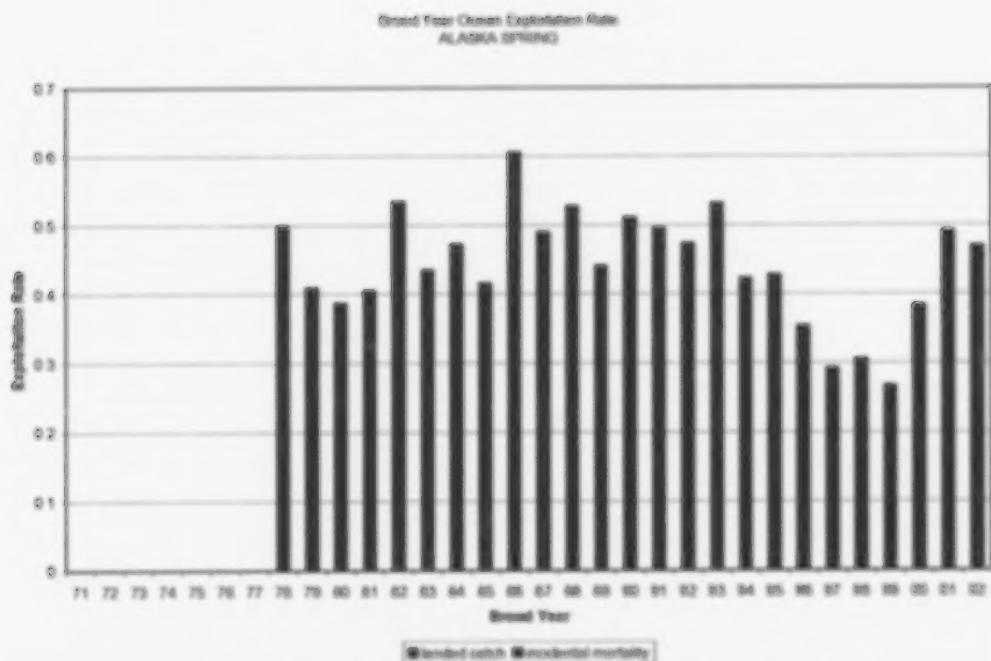


Figure E.1. Alaska spring (Alaska South SE) total exploitation rates by brood year.

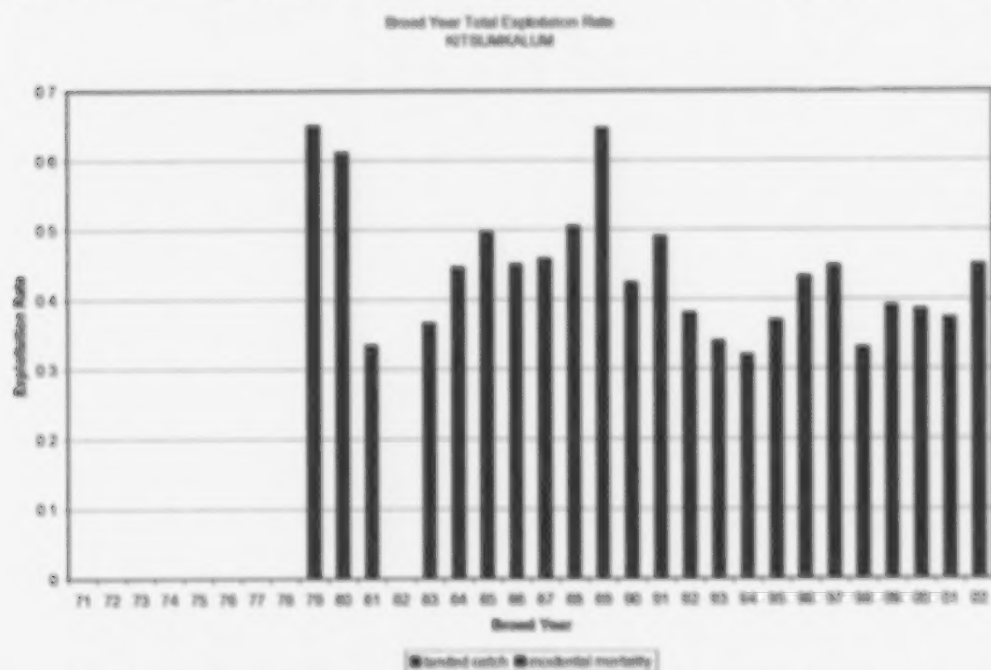


Figure E.2. Kitsumkalum River Summers (North/Central BC) total exploitation rates by brood year.

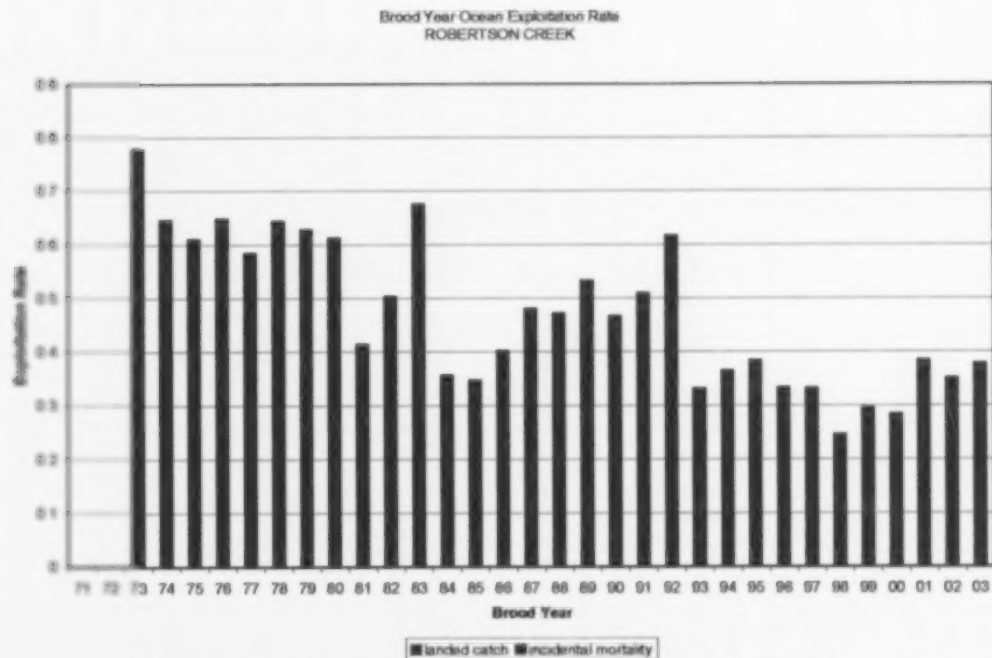


Figure E.3. Robertson Creek Falls (West Coast Vancouver Island Hatchery and Natural) ocean exploitation rates by brood year.

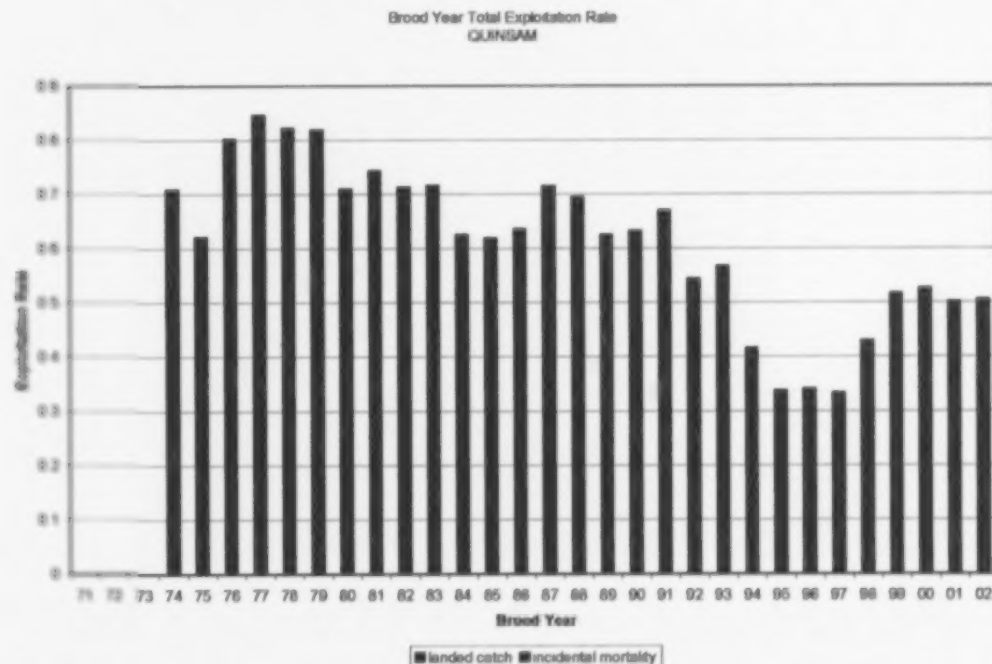


Figure E.4. Quinsam River Falls (Upper Strait of Georgia) total exploitation rates by brood year.



Figure E.5. Puntledge River Summers (Lower Strait of Georgia Hatchery) total exploitation rates by brood year.

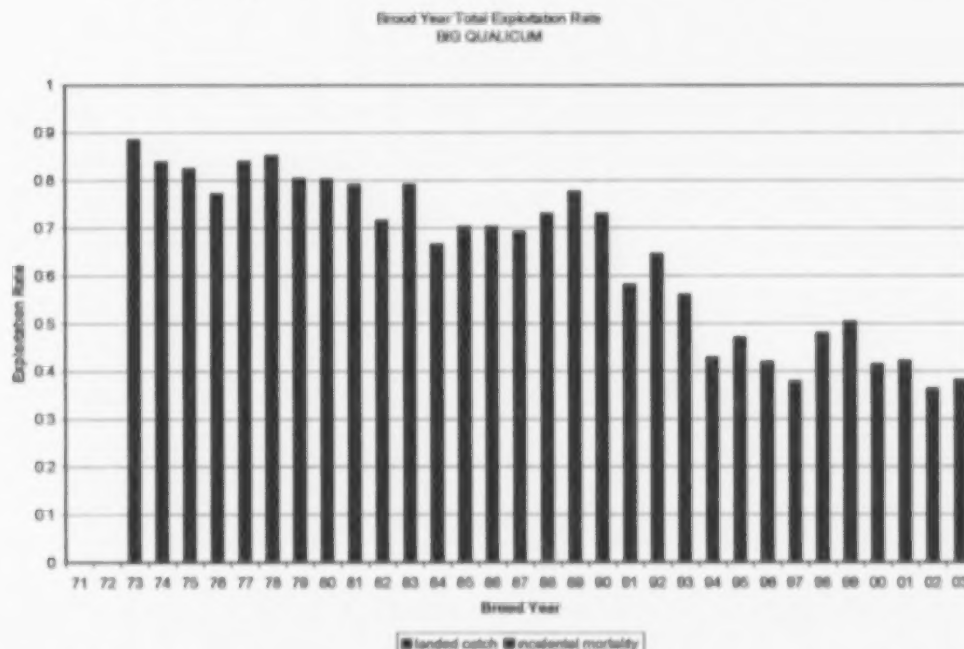


Figure E.6. Big Qualicum River Falls (Lower Strait of Georgia Hatchery and Natural) total exploitation rates by brood year.



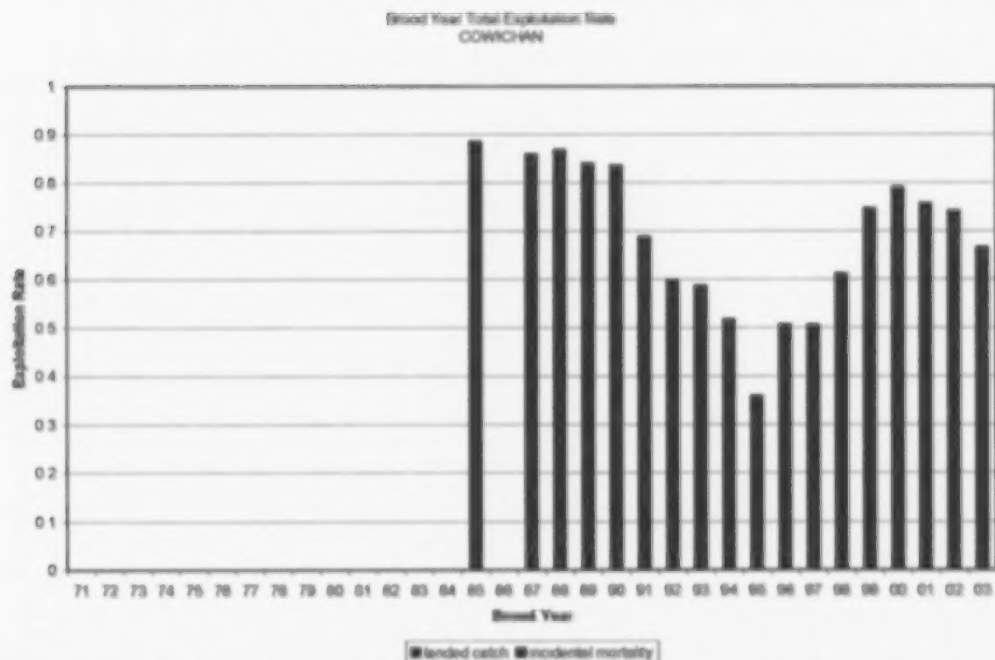


Figure E.7. Cowichan River Falls (Lower Strait of Georgia Natural) total exploitation rates by brood year.

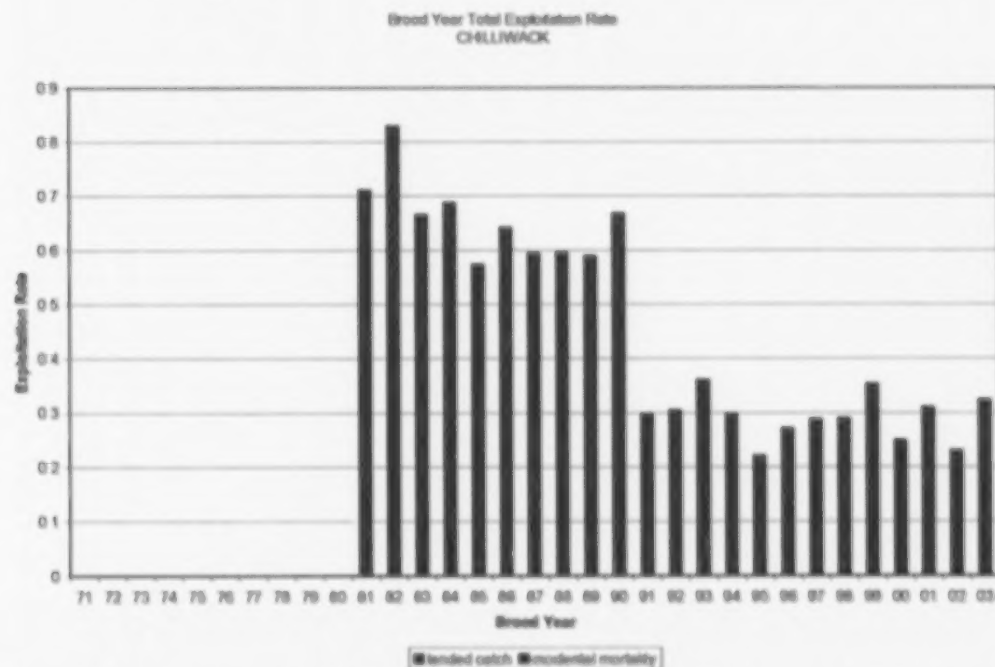


Figure E.8. Chilliwack River Falls (Fraser Late) total exploitation rates by brood year.

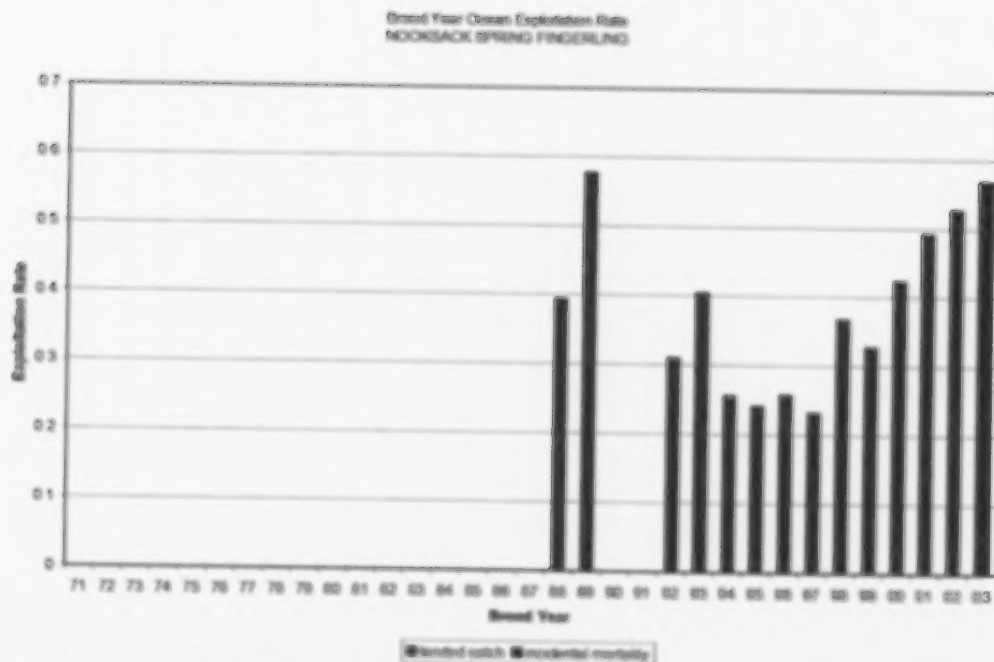


Figure E.9. Nooksack Spring Fingerling (Nooksack Spring) ocean exploitation rates by brood year.

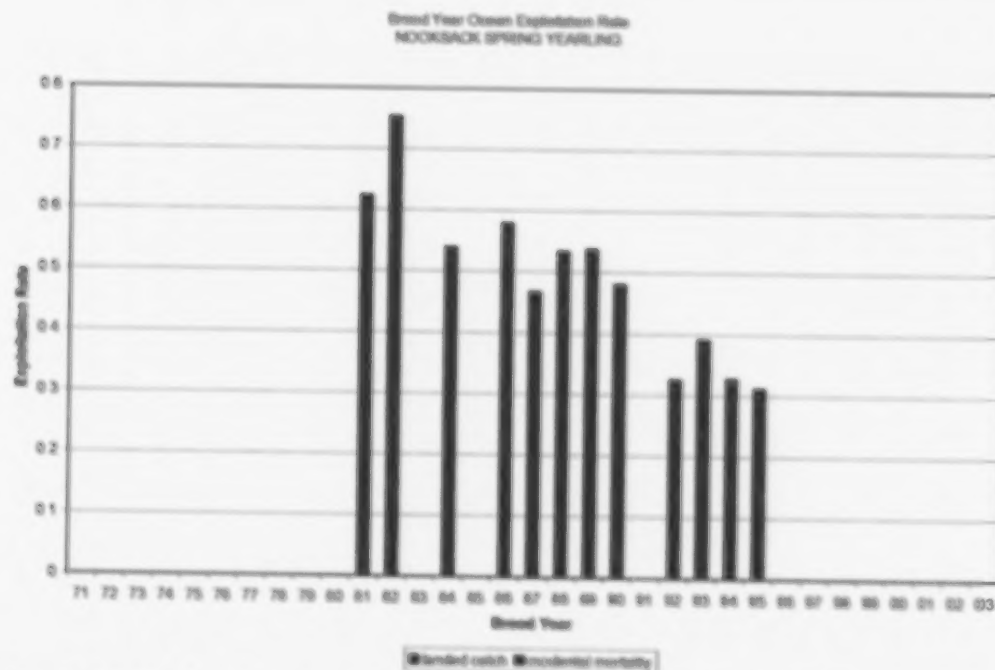


Figure E.10. Nooksack Spring Yearling (Nooksack Spring) ocean exploitation rates by brood year.

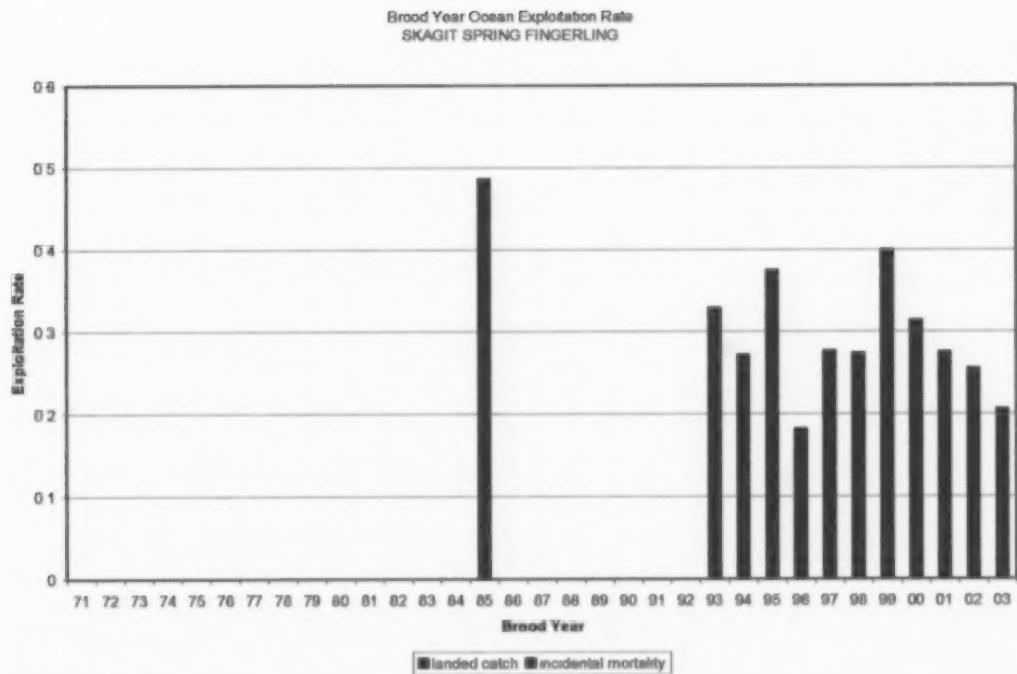


Figure E.11. Skagit Spring Fingerling ocean exploitation rates by brood year.

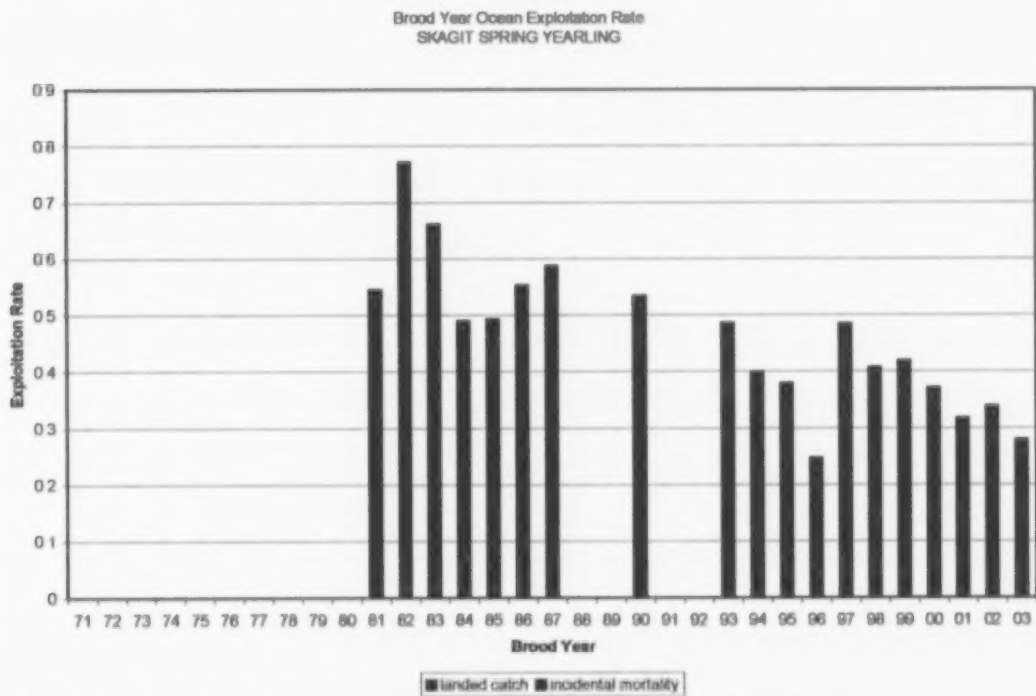


Figure E.12. Skagit Spring Yearling ocean exploitation rates by brood year.

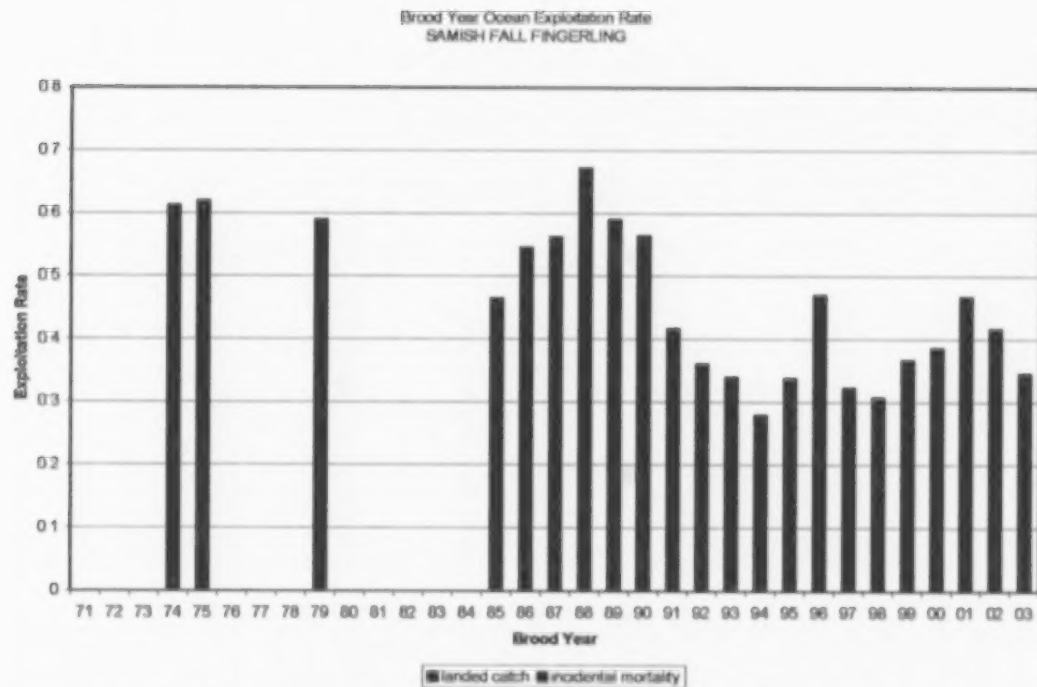


Figure E.13. Samish Fall Fingerling (Samish Fall) ocean exploitation rates by brood year.

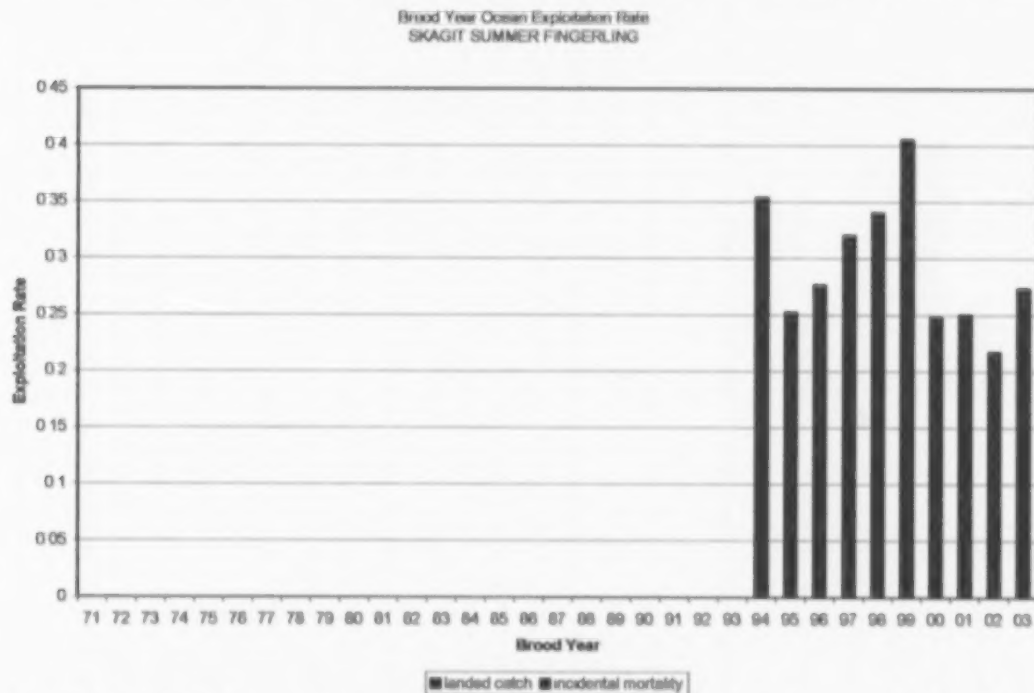


Figure E.14. Skagit Summer Fingerling (Skagit Wild) ocean exploitation rates by brood year.

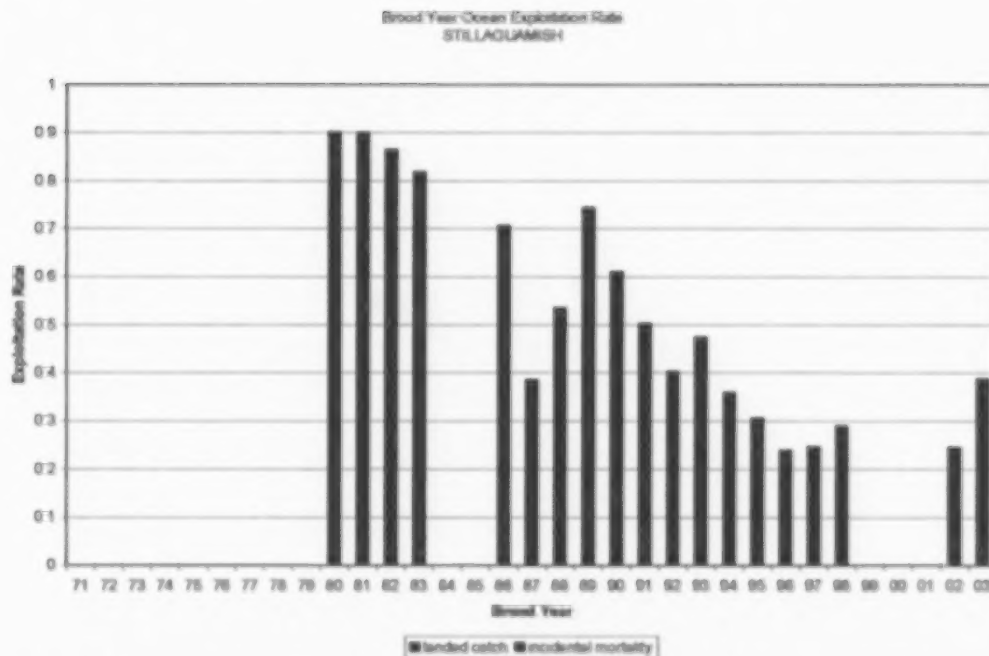


Figure E.15. Stillaguamish Fall Fingerling (Stillaguamish Wild) ocean exploitation rates by brood year.

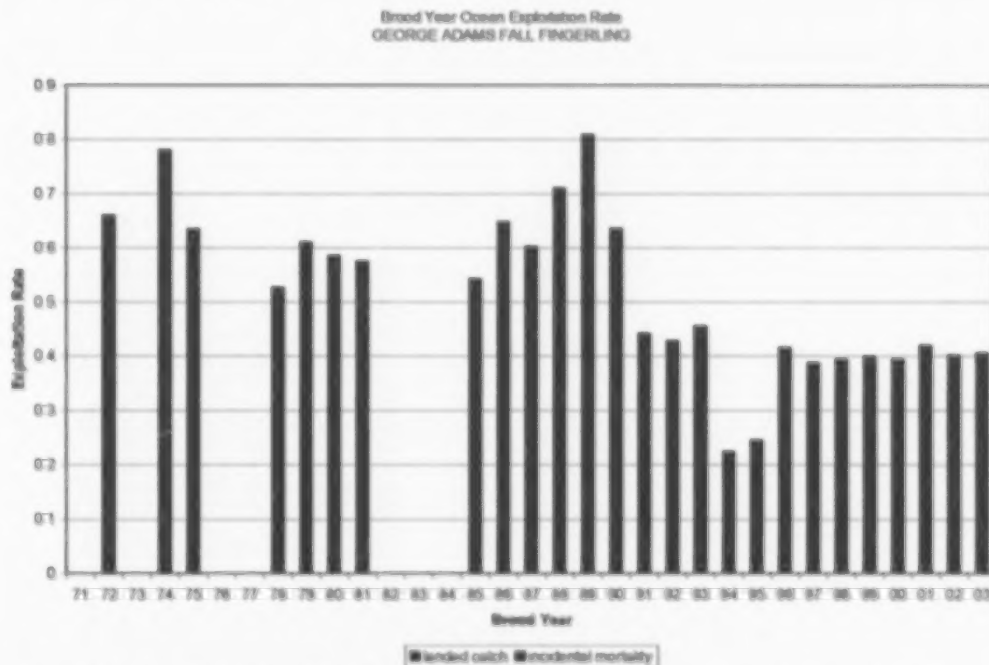


Figure E.16. George Adams Fall Fingerling ocean exploitation rates by brood year.



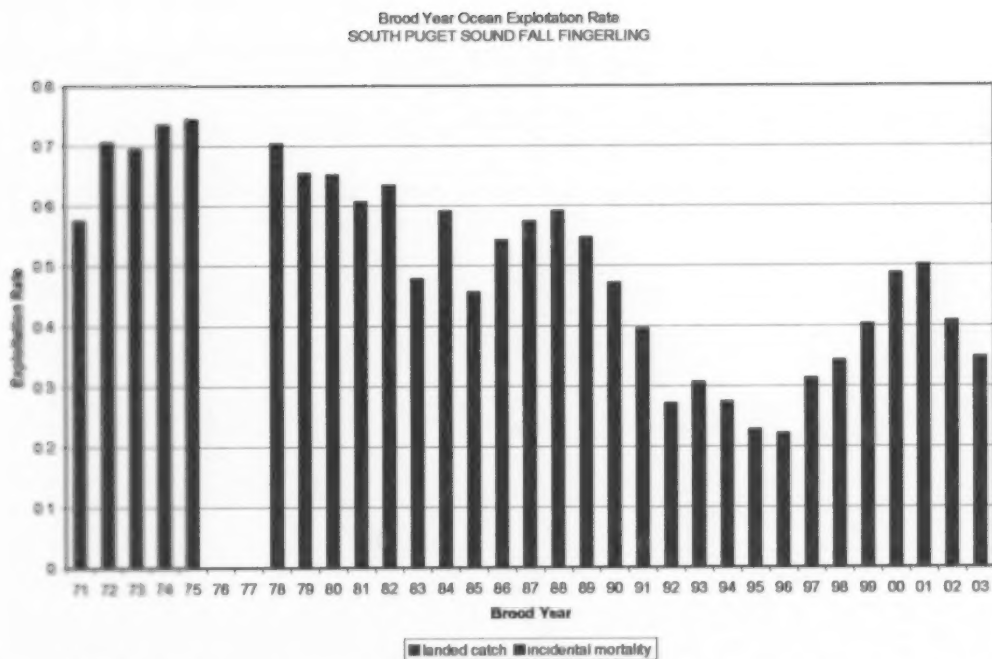


Figure E.17. South Puget Sound Fall Fingerling (Puget Sound Hatchery Fingerling) ocean exploitation rates by brood year.

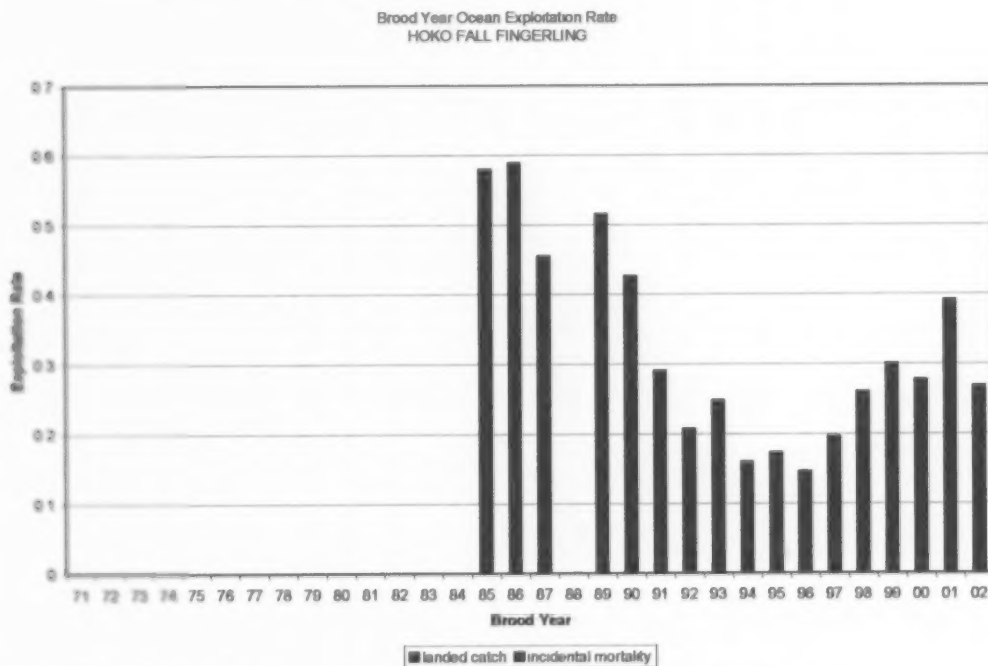


Figure E.18. Hoko Fall Fingerling ocean exploitation rates by brood year.

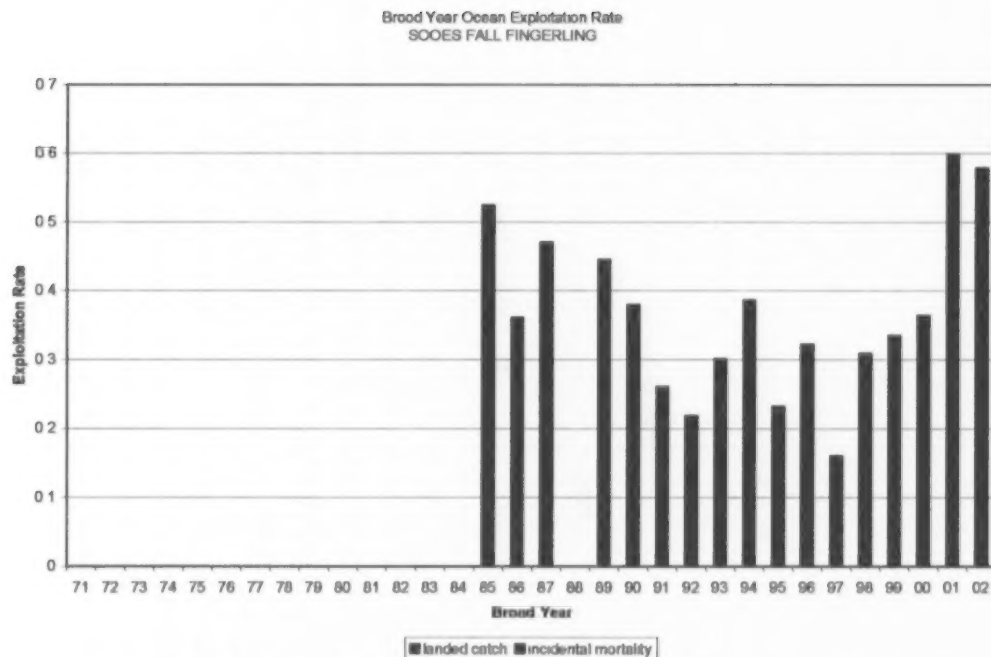


Figure E.19. Sooes Fall Fingerling (Washington Coastal Wild) ocean exploitation rates by brood year.

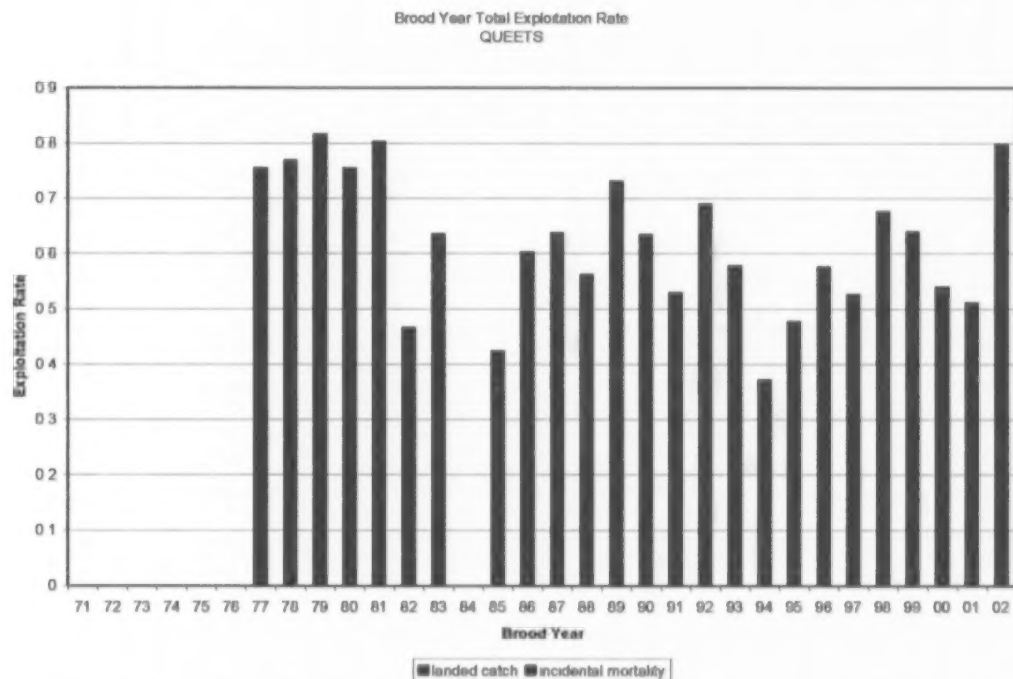


Figure E.20. Queets Fall Fingerling (Washington Coastal Wild) total exploitation rates by brood year.

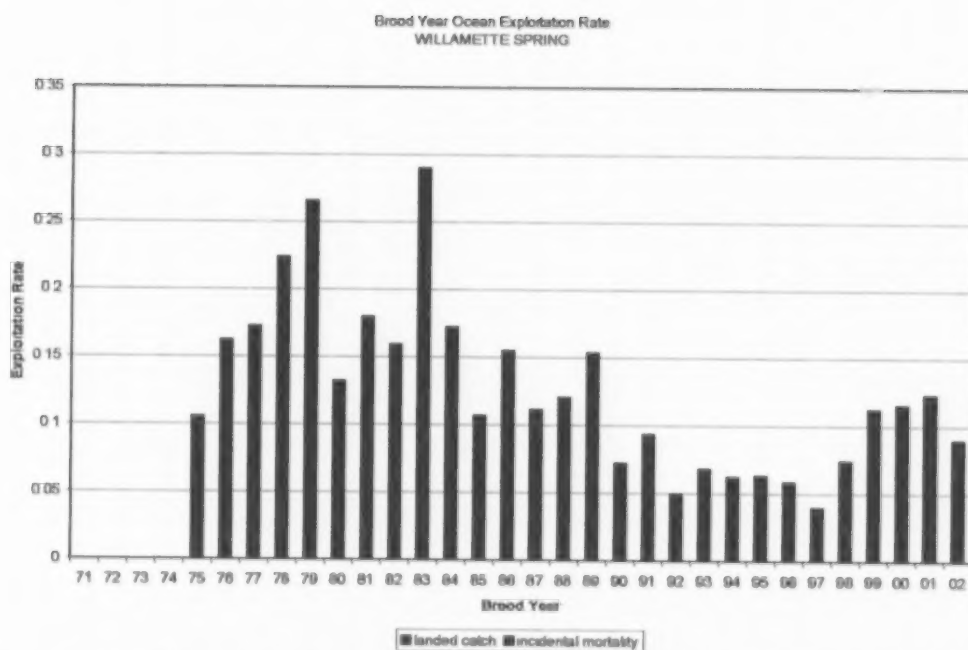


Figure E.21. Willamette Spring (Willamette River Hatchery) ocean exploitation rates by brood year.

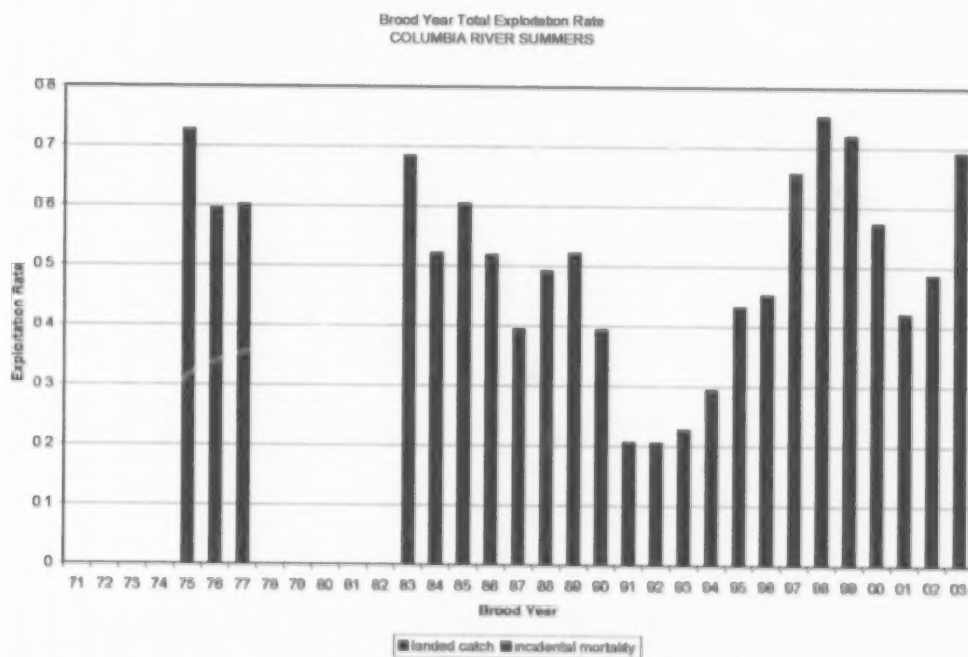


Figure E.22. Columbia Summers (Columbia River Summer) total exploitation rates by brood year.

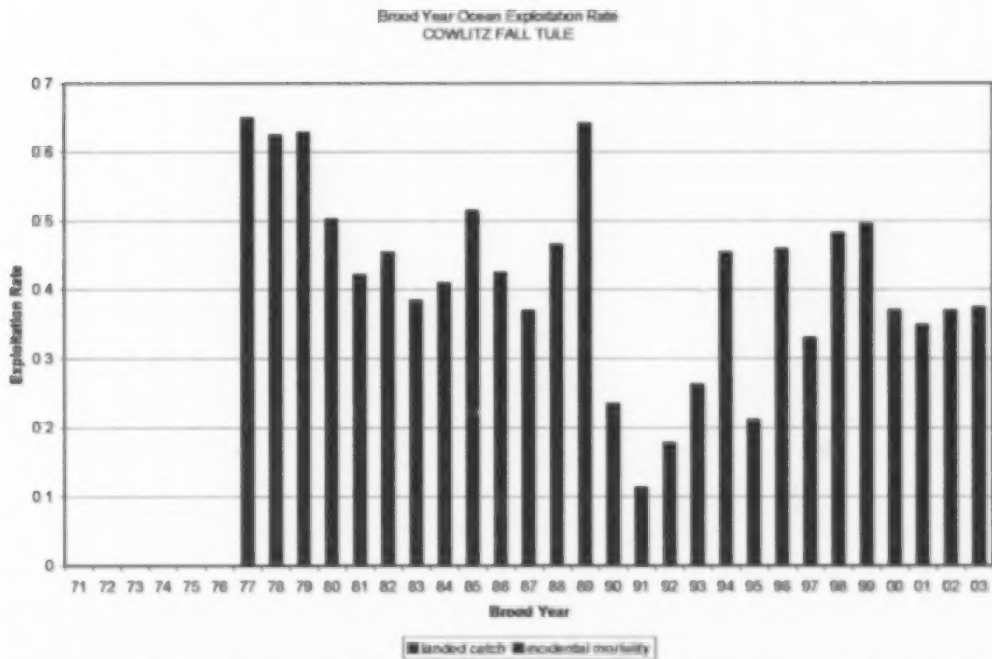


Figure E.23. Cowlitz Tule (Fall Cowlitz Hatchery) ocean exploitation rates by brood year.

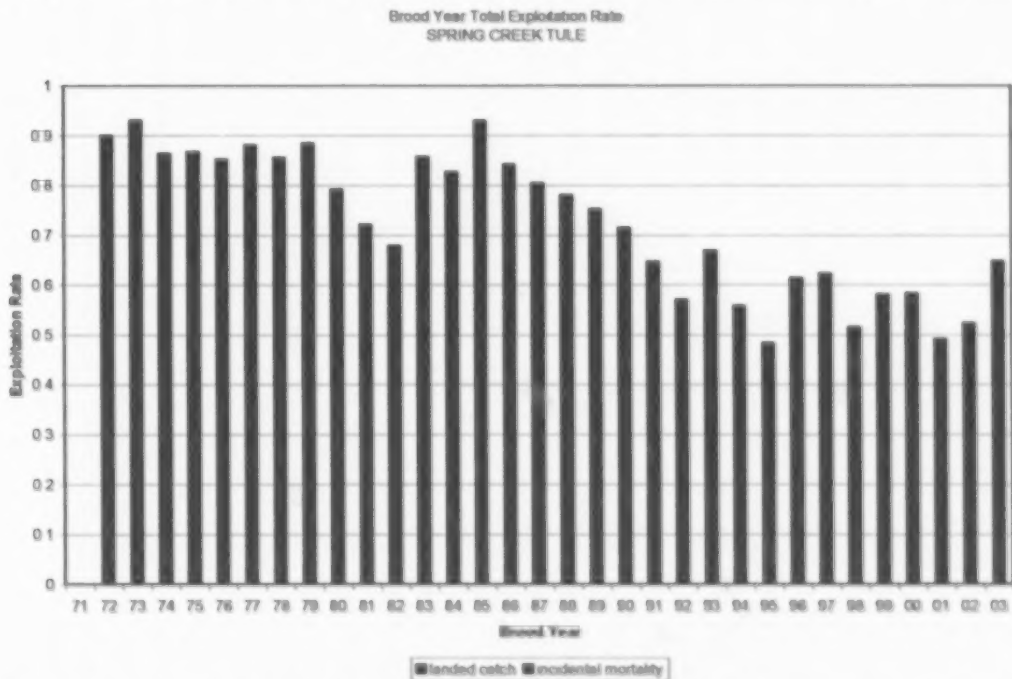


Figure E.24. Spring Creek Tule (Spring Creek Hatchery) total exploitation rates by brood year.

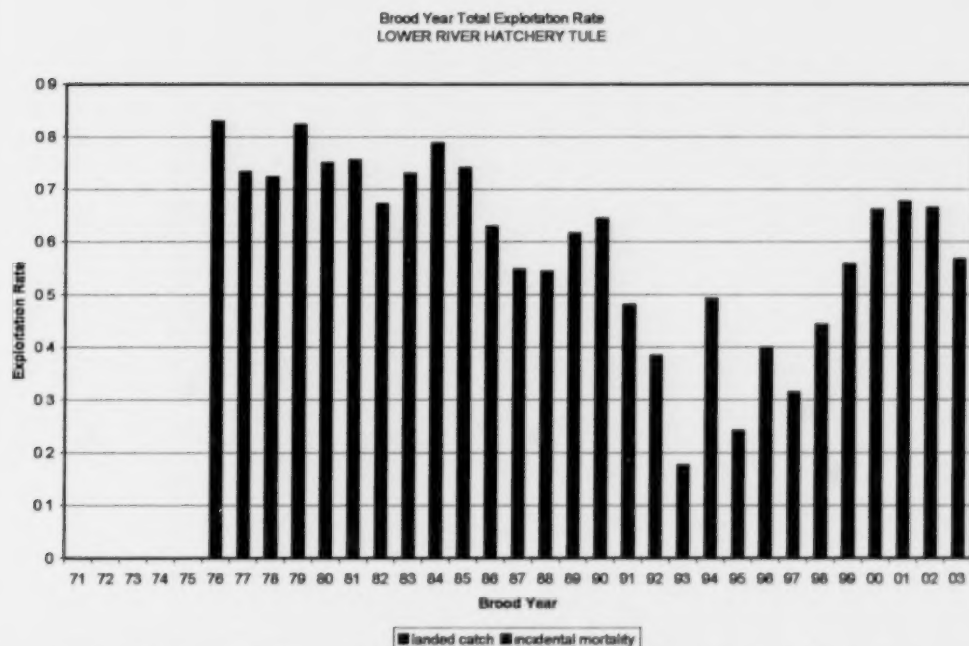


Figure E.25. Columbia Lower River Hatchery (Lower Bonneville Hatchery) total exploitation rates by brood year.

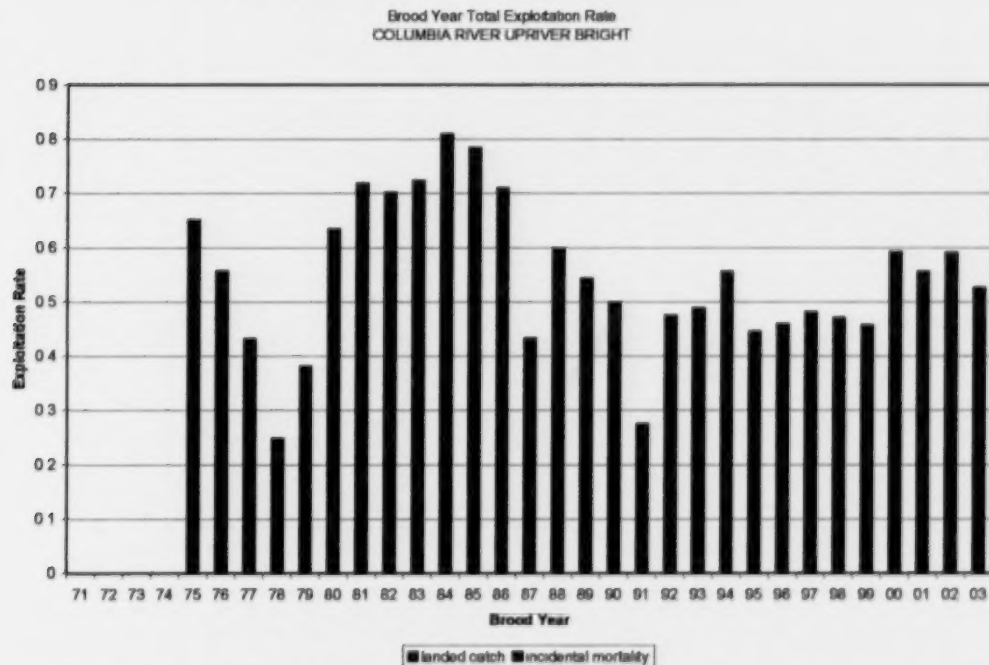


Figure E.26. Upriver Bright (Columbia River Upriver Brights) total exploitation rates by brood year.

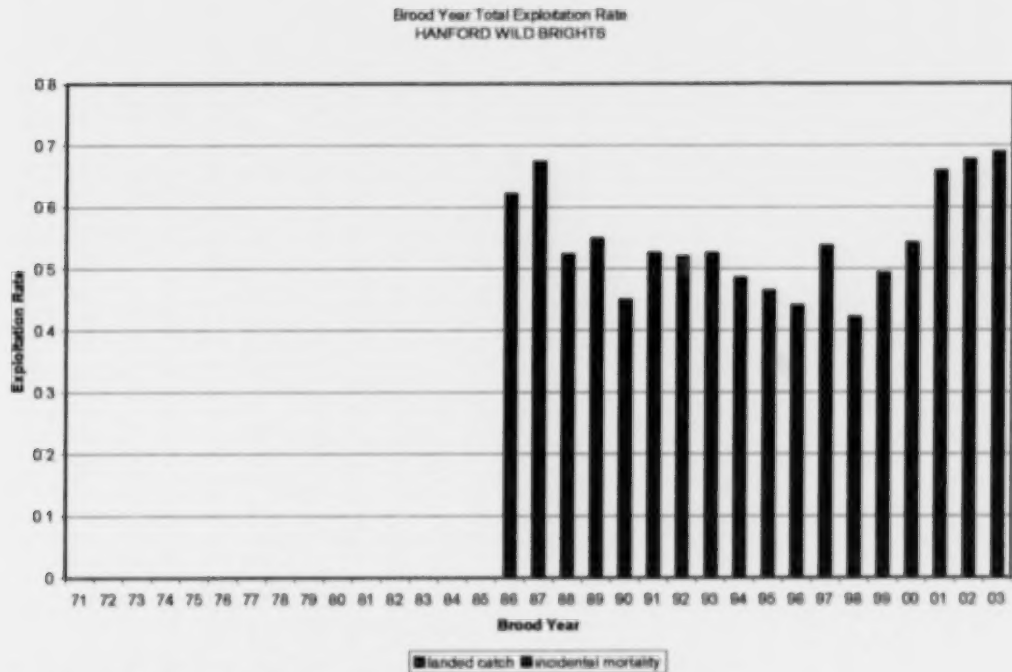


Figure E.27. Hanford Wild total exploitation rates by brood year.

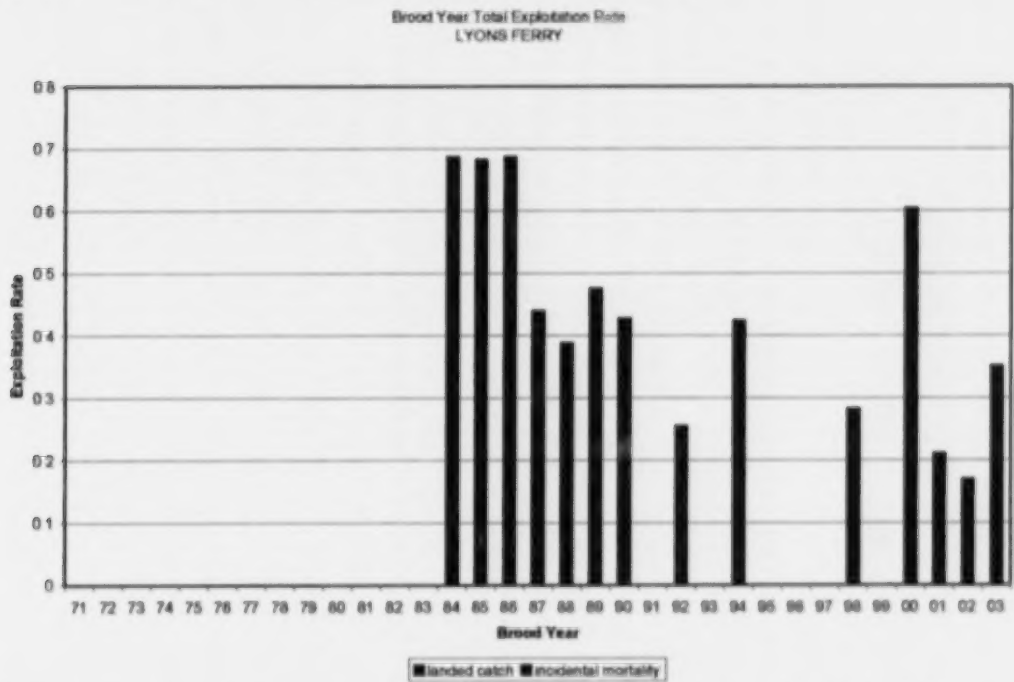


Figure E.28. Lyons Ferry (Lyons Ferry Hatchery) total exploitation rates by brood year.



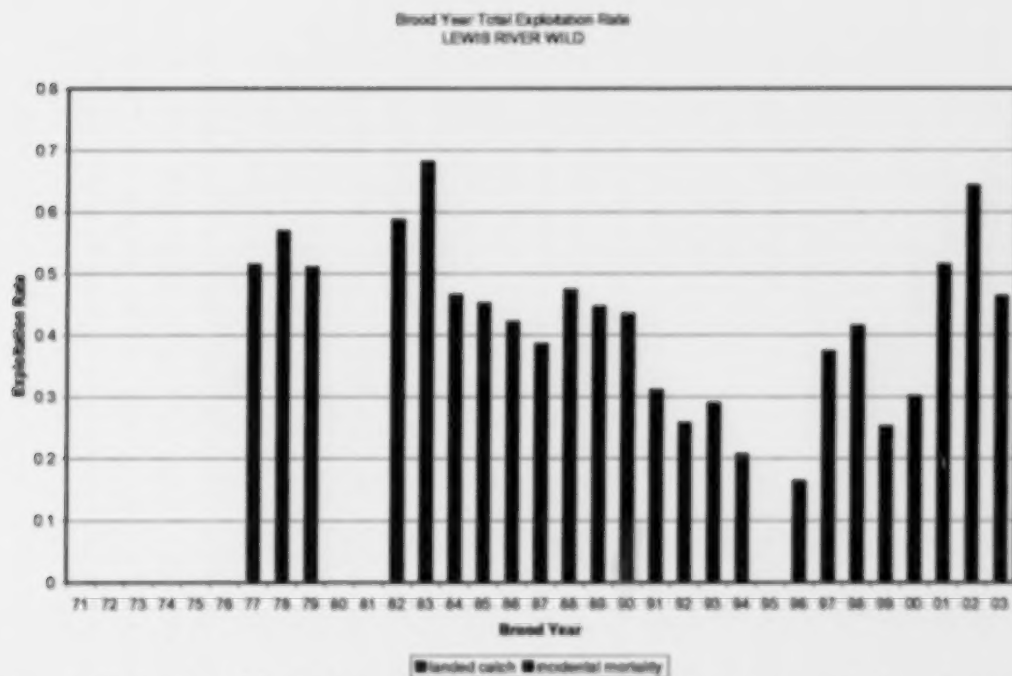


Figure E.29. Lewis River Wild (Lewis River Wild) total exploitation rates by brood year.

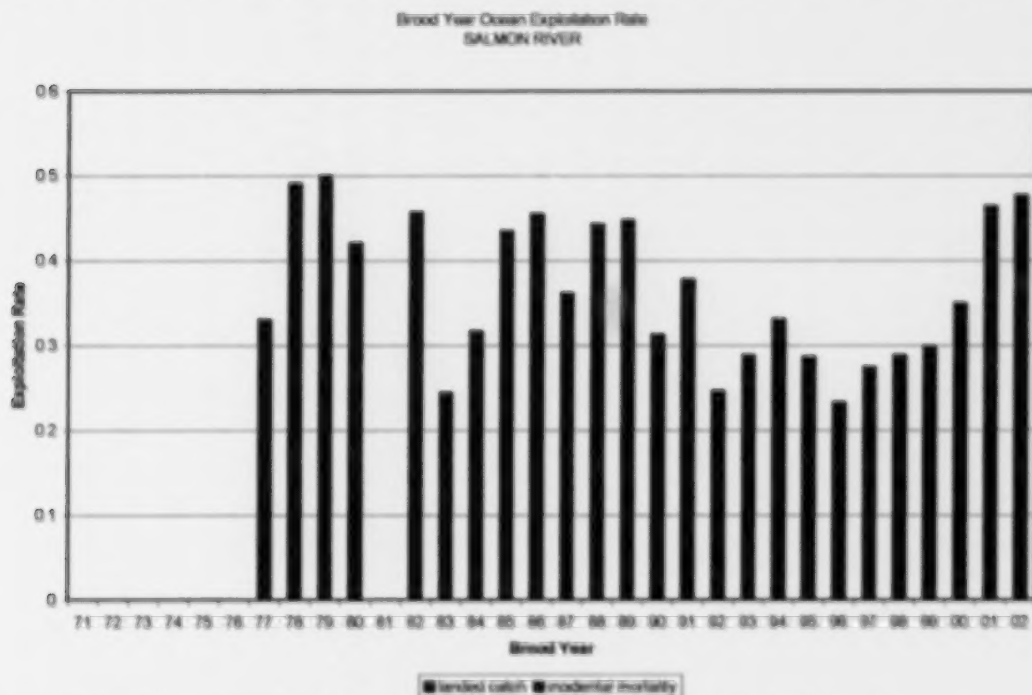


Figure E.30. Salmon River (Oregon Coast) ocean exploitation rates by brood year.

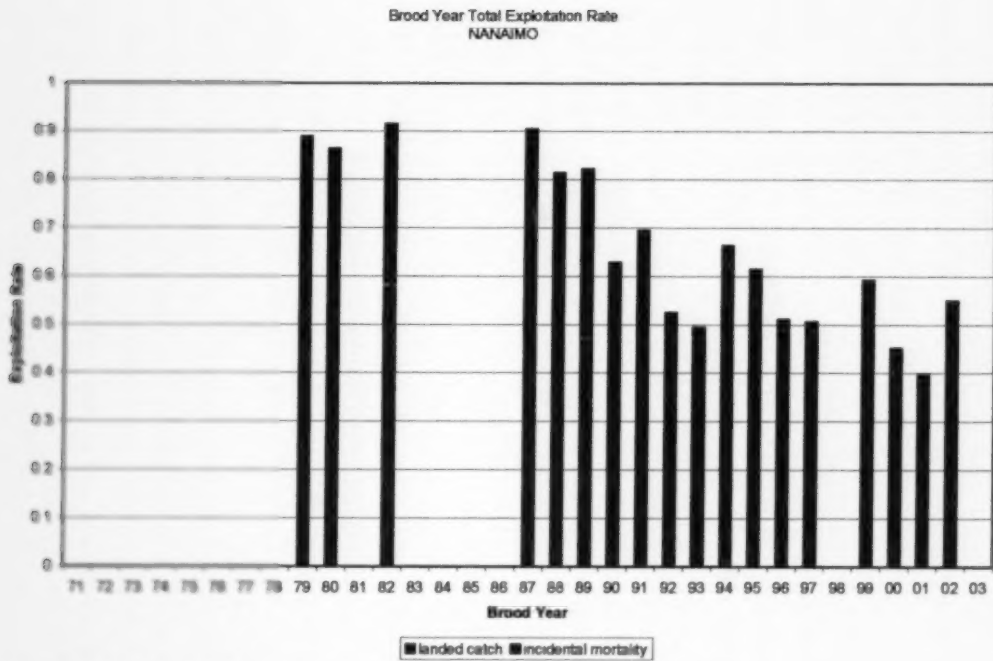


Figure E.31. Nanaimo River ocean exploitation rates by brood year.

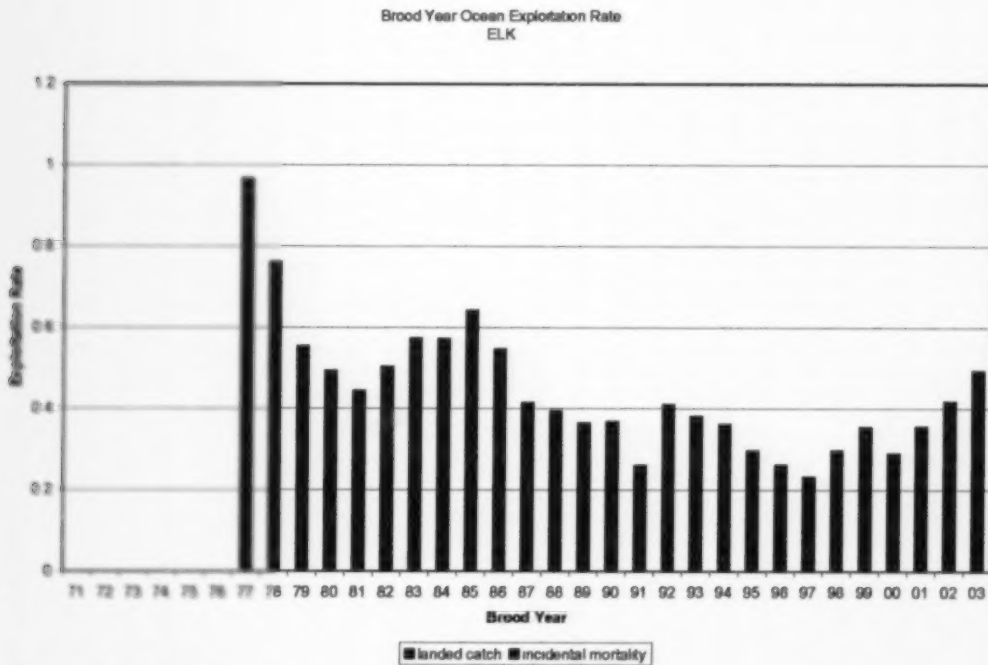


Figure E.32. Elk River ocean exploitation rates by brood year.

**Appendix F. Model estimates of the stock composition of the AABM, and other troll and sport fisheries for 2008 and the average from 1985 to 2007.**

“Catch as Percent of Fishery” represents the stock composition of a specific fishery; “Catch as Percent of All Fisheries” represents the proportion of the total catch of a stock that is caught in a specific fishery; “Percent of Total Return” represents the proportion of total return (catch + escapement) caught in a specific fishery.

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Appendix F.1. Southeast Alaska All Gear.

Model Stock	2008	Average (1985-2007)			Escapement Indicator Stocks
	Catch as Percent of Fishery	Catch as Percent of Fishery	Catch as Percent of All Fisheries	Catch as Percent of Total Return	
North/Central BC	17.58%	16.55%	22.88%	10.87%	Yakoun, Nass, Skeena
					Area 6 Index
					Area 8 Index
					Rivers and Smith Inlet
WCVI Hatchery	12.63%	16.13%	48.25%	17.49%	NA
Oregon Coastal North Migrating	6.95%	15.38%	35.87%	16.38%	Oregon Coastal
Columbia Upriver Bright	16.16%	15.35%	28.27%	14.08%	Columbia Upriver Bright
Fraser Early	8.12%	5.50%	28.90%	7.41%	Upper Fraser
					Middle Fraser
					Thompson
Mid-Columbia Brights	8.54%	5.13%	33.16%	13.53%	Not Represented
Upper Georgia Strait	6.09%	4.43%	34.41%	20.61%	Upper Georgia Strait
Alaska South SE	4.96%	4.04%	96.57%	37.86%	King Salmon, Andrew Creek,
					Blossom, Keta, Unuk, Chickamin
Washington Coastal Wild	3.35%	3.43%	20.73%	11.05%	Grays Harbor Fall
					Quillayute Fall
					Hoh Fall
					Queets Fall
WCVI Wild	1.57%	3.40%	49.32%	17.58%	WCVI
WA Coastal Hatchery	3.31%	2.67%	17.65%	10.33%	NA
Columbia Upriver Summer	6.33%	2.53%	34.11%	15.00%	Columbia Upriver Summer
Willamette River Hatchery	2.09%	2.05%	12.74%	5.21%	NA
Fall Cowlitz Hatchery	0.54%	1.09%	6.21%	2.42%	NA
Lewis River Wild	0.34%	0.83%	17.76%	7.85%	Lewis River
Lower GS Hatchery	0.22%	0.41%	3.52%	1.93%	NA
Lower Georgia Strait	0.17%	0.23%	3.77%	2.07%	Lower Georgia Strait
Fraser Late	0.06%	0.20%	0.42%	0.15%	Harrison
PS Hatchery Fingerling	0.27%	0.15%	0.46%	0.26%	NA
Skagit Summer/Fall	0.12%	0.10%	3.98%	1.18%	Skagit Summer/Fall
Spring Cowlitz Hatchery	0.05%	0.09%	1.68%	0.87%	NA
Snake River Fall	0.26%	0.08%	8.73%	5.40%	Not Represented
Puget Sound Natural	0.05%	0.06%	0.48%	0.26%	Green
Stillaguamish Summer/Fall	0.09%	0.06%	15.77%	6.10%	Stillaguamish
Nooksack Fall	0.02%	0.04%	0.15%	0.11%	NA
Snohomish Summer/Fall	0.07%	0.04%	3.48%	1.03%	Snohomish
PS Yearling	0.06%	0.02%	0.46%	0.32%	NA
Spring Creek Hatchery	0.00%	0.00%	0.00%	0.00%	NA
Lower Bonneville Hatchery	0.00%	0.00%	0.00%	0.00%	NA
Nooksack Spring	0.00%	0.00%	0.00%	0.00%	Not Represented

Appendix F.2. North B.C. Troll and Sport.

Model Stock	2008	Average (1985-2007)			Escapement Indicator Stocks
	Catch as Percent of Fishery	Catch as Percent of Fishery	Catch as Percent of All Fisheries	Catch as Percent of Total Return	
North/Central BC	71.44%	51.79%	67.82%	35.52%	Yakoun, Nass, Skeena
					Area 6 index
					Area 8 index
					Rivers and Smith Inlet
Oregon Coastal North Migrating	2.54%	12.37%	27.66%	13.82%	Oregon Coastal
Columbia Upriver Bright	3.34%	6.06%	11.33%	5.92%	Columbia Upriver Bright
WCVI Hatchery	2.03%	5.45%	14.97%	6.01%	NA
Upper Georgia Strait	5.92%	4.20%	34.54%	21.06%	Upper Georgia Strait
Fraser Early	2.25%	2.86%	15.84%	4.67%	Upper Fraser
					Middle Fraser
					Thompson
Willamette River Hatchery	1.17%	2.82%	15.83%	7.32%	NA
Washington Coastal Wild	1.18%	2.67%	15.16%	8.82%	Grays Harbor Fall
					Quillayute Fall
					Hoh Fall
					Queets Fall
WA Coastal Hatchery	1.15%	2.06%	13.49%	8.27%	NA
Mid-Columbia Brights	1.76%	1.80%	12.94%	5.63%	Not Represented
Columbia Upriver Summer	3.27%	1.67%	23.83%	11.17%	Columbia Upriver Summer
WCVI Wild	0.25%	1.22%	15.19%	6.00%	WCVI
Lower GS Hatchery	0.75%	0.98%	9.01%	4.96%	NA
Fall Cowlitz Hatchery	0.38%	0.80%	4.46%	1.89%	NA
Fraser Late	0.22%	0.79%	1.59%	0.64%	Harrison
Lower Georgia Strait	0.29%	0.48%	8.80%	4.98%	Lower Georgia Strait
Nooksack Fall	0.29%	0.38%	1.84%	1.34%	NA
Skagit Summer/Fall	0.53%	0.33%	15.46%	4.64%	Skagit Summer/Fall
Lewis River Wild	0.09%	0.29%	5.51%	2.81%	Lewis River
PS Hatchery Fingerling	0.38%	0.23%	0.84%	0.47%	NA
Spring Cowlitz Hatchery	0.09%	0.23%	4.47%	2.47%	NA
Snohomish Summer/Fall	0.23%	0.17%	15.17%	4.65%	Snohomish
PS Yearling	0.19%	0.09%	2.03%	1.37%	NA
Puget Sound Natural	0.06%	0.09%	0.79%	0.42%	Green
Alaska South SE	0.05%	0.09%	2.36%	0.92%	King Salmon, Andrew Creek
					Blossom, Keta, Unuk, Chickamin
Snake River Fall	0.09%	0.04%	6.09%	4.01%	Not Represented
Stillaguamish Summer/Fall	0.04%	0.03%	10.08%	3.99%	Stillaguamish
Spring Creek Hatchery	0.01%	0.01%	0.06%	0.05%	NA
Nooksack Spring	0.00%	0.00%	1.58%	0.52%	Not Represented
Lower Bonneville Hatchery	0.00%	0.00%	0.00%	0.00%	NA

Appendix F.3. Central B.C. Troll.

Model Stock	2008	Average (1985-2007)			Escapement Indicator Stocks
	Catch as Percent of Fishery	Catch as Percent of Fishery	Catch as Percent of All Fisheries	Catch as Percent of Total Return	
Fraser Late	0.00%	18.92%	1.85%	1.05%	Harrison
WCVI Hatchery	0.00%	16.30%	3.16%	1.33%	NA
Columbia Upriver Bright	0.00%	7.63%	0.81%	0.48%	Columbia Upriver Bright
North/Central BC	0.00%	6.47%	0.87%	0.38%	Yakoun, Nass, Skeena
					Area 6 Index
					Area 8 Index
					Rivers and Smith Inlet
Upper Georgia Strait	0.00%	5.66%	2.96%	1.93%	Upper Georgia Strait
Columbia Upriver Summer	0.00%	3.49%	3.15%	1.56%	Columbia Upriver Summer
WCVI Wild	0.00%	3.38%	3.12%	1.32%	WCVI
Fraser Early	0.00%	3.04%	0.89%	0.31%	Upper Fraser
					Middle Fraser
					Thompson
Washington Coastal Wild	0.00%	3.02%	1.02%	0.68%	Grays Harbor Fall
					Quillayute Fall
					Hoh Fall
					Queets Fall
Lower GS Hatchery	0.00%	2.83%	1.23%	0.86%	NA
Mid-Columbia Brights	0.00%	2.37%	0.96%	0.49%	Not Represented
WA Coastal Hatchery	0.00%	2.35%	0.95%	0.62%	NA
Oregon Coastal North Migrating	0.00%	2.21%	0.32%	0.17%	Oregon Coastal
Lower Bonneville Hatchery	0.00%	1.85%	0.89%	0.46%	NA
Lower Georgia Strait	0.00%	1.39%	1.17%	0.85%	Lower Georgia Strait
Nooksack Fall	0.00%	1.31%	0.33%	0.27%	NA
PS Hatchery Fingerling	0.00%	1.06%	0.22%	0.15%	NA
Skagit Summer/Fall	0.00%	0.84%	1.91%	0.82%	Skagit Summer/Fall
Lewis River Wild	0.00%	0.53%	0.55%	0.31%	Lewis River
Puget Sound Natural	0.00%	0.49%	0.22%	0.15%	Green
Snohomish Summer/Fall	0.00%	0.45%	1.54%	0.84%	Snohomish
Spring Creek Hatchery	0.00%	0.35%	0.09%	0.07%	NA
Willamette River Hatchery	0.00%	0.29%	0.10%	0.06%	NA
PS Yearling	0.00%	0.25%	0.32%	0.26%	NA
Fall Cowlitz Hatchery	0.00%	0.14%	0.04%	0.02%	NA
Spring Cowlitz Hatchery	0.00%	0.13%	0.17%	0.12%	NA
Snake River Fall	0.00%	0.09%	0.62%	0.46%	Not Represented
Stillaguamish Summer/Fall	0.00%	0.09%	1.65%	0.84%	Stillaguamish
Nooksack Spring	0.00%	0.01%	0.25%	0.14%	Not Represented
Alaska South SE	0.00%	0.00%	0.01%	0.00%	King Salmon, Andrew Creek
					Blossom, Keta, Unuk, Chickamin



#### Appendix F.4. WCVI Troll and Outside Sport.

Model Stock	2008	Average (1985-2007)			Escapement Indicator Stocks
	Catch as Percent of Fishery	Catch as Percent of Fishery	Catch as Percent of All Fisheries	Catch as Percent of Total Return	
Fraser Late	23.31%	22.79%	22.32%	10.97%	Harison
PS Hatchery Fingerling	12.09%	9.27%	15.74%	9.73%	NA
Columbia Upriver Bright	6.18%	8.27%	8.96%	4.95%	Columbia Upriver Bright
Fall Cowlitz Hatchery	5.63%	7.29%	24.31%	11.51%	NA
Spring Creek Hatchery	16.18%	7.04%	15.00%	11.82%	NA
Lower Bonneville Hatchery	4.34%	6.09%	31.91%	15.59%	NA
Oregon Coastal North Migrating	0.97%	5.05%	7.15%	3.60%	Oregon Coastal
WCVI Hatchery	0.00%	4.71%	7.51%	3.44%	NA
Nooksack Fall	2.15%	4.58%	10.90%	8.47%	NA
Puget Sound Natural	2.30%	3.64%	15.85%	9.72%	Green
Mid-Columbia Brights	5.95%	3.59%	12.95%	5.98%	Not Represented
Columbia Upriver Summer	5.59%	2.86%	22.02%	10.64%	Columbia Upriver Summer
Washington Coastal Wild	2.52%	2.43%	8.56%	4.84%	Grays Harbor Fall
					Quillayute Fall
					Hoh Fall
					Queets Fall
Willamette River Hatchery	1.47%	2.07%	7.00%	3.26%	NA
WA Coastal Hatchery	2.57%	1.97%	7.74%	4.67%	NA
Fraser Early	1.60%	1.37%	3.89%	1.13%	Upper Fraser
					Middle Fraser
					Thompson
WCVI Wild	0.00%	1.19%	7.50%	3.45%	WCVI
Skagit Summer/Fall	1.56%	0.97%	20.84%	7.32%	Skagit Summer/Fall
PS Yearling	1.52%	0.86%	9.62%	7.09%	NA
Lewis River Wild	0.46%	0.83%	10.49%	5.28%	Lewis River
Spring Cowlitz Hatchery	0.37%	0.75%	7.72%	4.99%	NA
Lower GS Hatchery	0.53%	0.51%	2.28%	1.35%	NA
Snohomish Summer/Fall	0.61%	0.49%	18.93%	7.35%	Snohomish
North/Central BC	0.49%	0.48%	0.40%	0.19%	Yakoun, Nass, Skeena
					Area 6 Index
					Area 8 Index
					Rivers and Smith Inlet
Snake River Fall	1.15%	0.40%	23.16%	15.88%	Not Represented
Lower Georgia Strait	0.22%	0.25%	2.29%	1.39%	Lower Georgia Strait
Upper Georgia Strait	0.13%	0.12%	0.52%	0.33%	Upper Georgia Strait
Stillaguamish Summer/Fall	0.11%	0.11%	15.62%	6.94%	Stillaguamish
Nooksack Spring	0.02%	0.02%	10.01%	3.86%	Not Represented
Alaska South SE	0.00%	0.00%	0.00%	0.00%	King Salmon, Andrew Creek
					Blossom, Keta, Unuk, Chickamin

Appendix F.5. Strait of Georgia Sport and Troll.

Model Stock	2008	Average (1985-2007)			Escapement Indicator Stocks
	Catch as Percent of Fishery	Catch as Percent of Fishery	Catch as Percent of All Fisheries	Catch as Percent of Total Return	
Fraser Late	33.53%	47.84%	42.12%	21.37%	Harrison
Lower GS Hatchery	11.25%	11.28%	45.68%	28.18%	NA
Nooksack Fall	7.19%	9.02%	19.64%	14.95%	NA
Lower Georgia Strait	4.49%	5.99%	46.49%	29.63%	Lower Georgia Strait
PS Hatchery Fingerling	10.09%	5.26%	8.27%	5.08%	NA
Fraser Early	6.60%	4.14%	10.53%	2.93%	Upper Fraser
					Middle Fraser
					Thompson
Upper Georgia Strait	4.92%	3.04%	11.78%	7.13%	Upper Georgia Strait
PS Yearling	5.91%	2.07%	20.19%	14.77%	NA
Puget Sound Natural	1.97%	2.01%	8.01%	4.86%	Green
Skagit Summer/Fall	2.88%	1.26%	25.68%	8.85%	Skagit Summer/Fall
Columbia Upriver Bright	1.65%	1.10%	1.04%	0.55%	Columbia Upriver Bright
Washington Coastal Wild	1.05%	0.98%	3.05%	1.75%	Grays Harbor Fall
					Quillayute Fall
					Hoh Fall
					Queets Fall
Spring Creek Hatchery	1.26%	0.89%	1.69%	1.32%	NA
WCVI Hatchery	0.92%	0.82%	1.44%	0.49%	NA
WA Coastal Hatchery	1.11%	0.80%	2.75%	1.70%	NA
Lower Bonneville Hatchery	0.42%	0.74%	3.69%	1.58%	NA
Snohomish Summer/Fall	1.22%	0.64%	23.71%	8.74%	Snohomish
North/Central BC	1.01%	0.64%	0.55%	0.25%	Yakoun, Nass, Skeena
					Area 6 Index
					Area 8 Index
					Rivers and Smith Inlet
Columbia Upriver Summer	1.12%	0.39%	3.19%	1.40%	Columbia Upriver Summer
Mid-Columbia Brights	0.72%	0.37%	1.28%	0.58%	Not Represented
Stillaguamish Summer/Fall	0.28%	0.18%	23.06%	9.99%	Stillaguamish
Nooksack Spring	0.17%	0.18%	66.35%	26.82%	Not Represented
WCVI Wild	0.11%	0.17%	1.43%	0.48%	WCVI
Willamette River Hatchery	0.09%	0.13%	0.39%	0.19%	NA
Spring Cowlitz Hatchery	0.03%	0.05%	0.48%	0.28%	NA
Fall Cowlitz Hatchery	0.00%	0.02%	0.04%	0.02%	NA
Lewis River Wild	0.00%	0.02%	0.16%	0.10%	Lewis River
Snake River Fall	0.01%	0.00%	0.08%	0.06%	Not Represented
Alaska South SE	0.00%	0.00%	0.00%	0.00%	King Salmon, Andrew Creek
					Blossom, Keta, Unuk, Chickamin
Oregon Coastal North Migrating	0.00%	0.00%	0.00%	0.00%	Oregon Coastal

Appendix F.6. Washington/Oregon Troll and Sport.

Model Stock	2008	Average (1985-2007)			Escapement Indicator Stocks
	Catch as Percent of Fishery	Catch as Percent of Fishery	Catch as Percent of All Fisheries	Catch as Percent of Total Return	
Spring Creek Hatchery	42.40%	22.27%	30.92%	24.55%	NA
Fraser Late	14.06%	20.12%	12.21%	5.82%	Harrison
Fall Cowlitz Hatchery	16.43%	19.07%	40.61%	18.24%	NA
Lower Bonneville Hatchery	6.60%	11.47%	39.60%	17.82%	NA
Spring Cowlitz Hatchery	2.00%	4.80%	33.70%	19.60%	NA
Columbia Upriver Bright	4.63%	3.95%	2.69%	1.41%	Columbia Upriver Bright
PS Hatchery Fingerling	3.29%	3.66%	3.70%	2.21%	NA
Oregon Coastal North Migrating	0.91%	2.75%	2.38%	1.11%	Oregon Coastal
Willamette River Hatchery	0.94%	1.87%	4.03%	1.78%	NA
Nooksack Fall	0.59%	1.80%	2.48%	1.89%	NA
Puget Sound Natural	0.62%	1.46%	3.76%	2.18%	Green
Lewis River Wild	0.80%	1.43%	12.44%	5.52%	Lewis River
Mid-Columbia Brights	1.97%	1.34%	3.09%	1.36%	Not Represented
Washington Coastal Wild	0.71%	1.26%	2.44%	1.35%	Grays Harbor Fall
					Quillayute Fall
					Hoh Fall
					Queets Fall
WA Coastal Hatchery	0.73%	1.03%	2.23%	1.32%	NA
Columbia Upriver Summer	1.24%	0.63%	3.07%	1.44%	Columbia Upriver Summer
Snake River Fall	1.46%	0.61%	21.62%	14.35%	Not Represented
Fraser Early	0.30%	0.17%	0.36%	0.10%	Upper Fraser
					Middle Fraser
					Thompson
PS Yearling	0.21%	0.15%	0.99%	0.70%	NA
Alaska South SE	0.05%	0.08%	0.72%	0.28%	King Salmon, Andrew Creek
					Blossom, Keta, Unuk, Chickamin
Lower GS Hatchery	0.03%	0.04%	0.12%	0.07%	NA
WCVI Hatchery	0.01%	0.03%	0.03%	0.01%	NA
Lower Georgia Strait	0.01%	0.02%	0.12%	0.07%	Lower Georgia Strait
WCVI Wild	0.00%	0.01%	0.03%	0.01%	WCVI
Skagit Summer/Fall	0.01%	0.00%	0.04%	0.01%	Skagit Summer/Fall
Snohomish Summer/Fall	0.00%	0.00%	0.03%	0.01%	Snohomish
Upper Georgia Strait	0.00%	0.00%	0.00%	0.00%	Upper Georgia Strait
Nooksack Spring	0.00%	0.00%	0.00%	0.00%	Not Represented
North/Central BC	0.00%	0.00%	0.00%	0.00%	Yakoun, Nass, Skeena
					Area 6 Index
					Area 8 Index
					Rivers and Smith Inlet
Stillaguamish Summer/Fall	0.00%	0.00%	0.00%	0.00%	Stillaguamish

**Appendix G. Incidental mortality rates applied in the CTC model. Rates in original model were applied to all years. In the current model, rates in some fisheries vary in accordance to changes in management regulations.**

Fishery Number	Fishery	Rates in original Model			Rates applied in Model CLB0807			Applicable Years
		Sublegal Rate	Legal Rate	Dropoff	Sublegal Rate	Legal Rate	Dropoff	
1	Alaska T	0.3	0.3	0	0.255	0.211	0.008	All
2	North T	0.3	0.3	0	0.255	0.211	0.017	1979-1995
2	North T				0.220	0.185	0.017	1996-2006
3	Centr T	0.3	0.3	0	0.255	0.211	0.017	1979-1995
3	Centr T				0.220	0.185	0.017	1996-2006
4	WCVI T	0.3	0.3	0	0.255	0.211	0.017	1979-1997
4	WCVI T				0.220	0.185	0.017	1998-2006
5	WA/OR T	0.3	0.3	0	0.255	0.211	0.017	1979-1983
5	WA/OR T				0.220	0.185	0.017	1984-2006
6	Geo St T	0.3	0.3	0	0.255	0.211	0.017	1979-1985, 1987
6	Geo St T				0.220	0.185	0.017	1986, 1988-2006
7	Alaska N	0.9	0.9	0	0.9	0.9	0	All
8	North N	0.9	0.9	0	0.9	0.9	0	All
9	Centr N	0.9	0.9	0	0.9	0.9	0	All
10	WCVI N	0.9	0.9	0	0.9	0.9	0	All
11	J De F N	0.9	0.9	0	0.9	0.9	0	All
12	PgtNth N	0.9	0.9	0	0.9	0.9	0	All
13	PgtSth N	0.9	0.9	0	0.9	0.9	0	All
14	WashCst N	0.9	0.9	0	0.9	0.9	0	All
15	Col R N	0.9	0.9	0	0.9	0.9	0	All
16	JohnSt N	0.9	0.9	0	0.9	0.9	0	All
17	Fraser N	0.9	0.9	0	0.9	0.9	0	All
18	Alaska S	0.3	0.3	0	0.123	0.123	0.036	All
19	Nor/Cen S	0.3	0.3	0	0.123	0.123	0.036	All
20	WCVI S	0.3	0.3	0	0.123	0.123	0.069	All
21	Wash Ocn S	0.3	0.3	0	0.123	0.123	0.069	All
22	Pgt Nth S	0.3	0.3	0	0.123	0.123	0.145	All
23	Pgt Sth S	0.3	0.3	0	0.123	0.123	0.145	All
24	Geo St S	0.3	0.3	0	0.322	0.322	0.069	1979-1981
24	Geo St S				0.123	0.123	0.069	1982-2006
25	Col R S	0.3	0.3	0	0.123	0.123	0.069	All

**Appendix H. Time series of abundance indices from 1979 to 2009 for SEAK, NBC, and WCVI AABM fisheries as estimated by CTC Chinook Model calibration CLB0907.**

This time series is NOT the first postseason AI and is for trend analysis only (Figures 3.4 to 3.6). For evaluation of overage and underage (Tables 3.4 and 3.5), use the first postseason AI in Table 3.3 instead. (Source 0907PABD).

Year	SEAK	NBC	WCVI
1979	0.96	1.03	1.10
1980	1.02	0.97	0.96
1981	0.92	0.94	0.93
1982	1.09	1.06	1.01
1983	1.30	1.24	0.95
1984	1.48	1.41	1.01
1985	1.34	1.32	0.98
1986	1.51	1.48	1.03
1987	1.76	1.75	1.19
1988	2.17	1.87	1.12
1989	1.87	1.69	0.98
1990	1.90	1.65	0.89
1991	1.80	1.53	0.75
1992	1.67	1.41	0.78
1993	1.68	1.43	0.69
1994	1.58	1.26	0.52
1995	1.06	0.98	0.41
1996	0.94	0.93	0.49
1997	1.25	1.12	0.58
1998	1.20	1.01	0.56
1999	1.09	0.95	0.49
2000	0.97	0.94	0.50
2001	1.17	1.21	0.77
2002	1.76	1.70	1.13
2003	2.21	1.91	1.19
2004	2.06	1.80	0.98
2005	1.81	1.55	0.79
2006	1.51	1.24	0.62
2007	1.20	0.98	0.53
2008	1.01	0.93	0.64
2009	1.33	1.10	0.72

**Appendix I. Abundance indices in total and by model stock for AABM fisheries, from Calibration #0907.**

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Year	Alaska South SE	North / Centr	Fraser Early	Fraser Late	WCVI Hatchery	WCVI Natural	Georgia St Upper	Georgia St Lwr Nat	Georgia St Lwr Hat	Nooksack Fall	Pgt Sd Fmg	Pgt Sd NatF	Pgt Sd Year	Nooksack Spring	Skagit Wild	AI Total
1979	0 03	0 12	0 06	0 00	0 05	0 07	0 04	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 96
1980	0 03	0 13	0 05	0 00	0 10	0 15	0 04	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 02
1981	0 04	0 14	0 04	0 00	0 08	0 12	0 04	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 92
1982	0 05	0 14	0 04	0 00	0 19	0 21	0 04	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 09
1983	0 06	0 16	0 04	0 00	0 30	0 14	0 03	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 30
1984	0 06	0 19	0 05	0 00	0 28	0 10	0 03	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 48
1985	0 06	0 21	0 07	0 00	0 15	0 05	0 04	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 34
1986	0 07	0 22	0 07	0 00	0 12	0 04	0 06	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 51
1987	0 07	0 24	0 07	0 00	0 09	0 03	0 04	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 76
1988	0 06	0 25	0 07	0 00	0 22	0 06	0 06	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2 17
1989	0 04	0 26	0 07	0 00	0 32	0 07	0 05	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 87
1990	0 03	0 26	0 07	0 00	0 47	0 10	0 04	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 90
1991	0 03	0 27	0 06	0 00	0 59	0 13	0 04	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 80
1992	0 03	0 27	0 06	0 00	0 55	0 13	0 03	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 67
1993	0 04	0 24	0 06	0 00	0 52	0 14	0 02	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 68
1994	0 03	0 22	0 07	0 00	0 42	0 11	0 01	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 58
1995	0 03	0 23	0 07	0 00	0 15	0 04	0 02	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 06
1996	0 03	0 23	0 08	0 00	0 05	0 02	0 02	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 94
1997	0 03	0 24	0 10	0 00	0 18	0 05	0 02	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 25
1998	0 04	0 23	0 08	0 00	0 28	0 07	0 03	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 20
1999	0 04	0 24	0 07	0 00	0 14	0 03	0 03	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 09
2000	0 05	0 26	0 07	0 00	0 05	0 01	0 04	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 97
2001	0 05	0 26	0 08	0 00	0 07	0 01	0 05	0 00	0 01	0 00	0 00	0 00	0 00	0 00	0 00	1 17
2002	0 04	0 25	0 10	0 00	0 23	0 03	0 06	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 76
2003	0 04	0 24	0 10	0 00	0 37	0 04	0 06	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2 21
2004	0 04	0 24	0 09	0 00	0 37	0 03	0 07	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2 06
2005	0 05	0 23	0 09	0 00	0 26	0 02	0 07	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 81
2006	0 06	0 22	0 10	0 00	0 23	0 03	0 07	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 51
2007	0 06	0 20	0 08	0 00	0 26	0 03	0 06	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 20
2008	0 04	0 18	0 08	0 00	0 13	0 02	0 04	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 01
2009	0 05	0 21	0 09	0 00	0 13	0 02	0 06	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 33
Average	0 05	0 22	0 07	0 00	0 24	0 07	0 04	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 44

-continued-

Table 1.1. Page 2 of 2 (stock groups 16-30).

Year	Stillaguamish		WA		Col		Lwr		Fall		Lewis R		Willamette		Spr		Cowlitz		Col R		Oregon		WA		Lyons		Mid Col		All Total
	Wild	Wild	Coastal	Coastal	UpRiver	UpRiver	Bonneville	Bonneville	Cowlitz	Cowlitz	Wild	Wild	R Hat	R Hat	Spr	Spr	Hat	Hat	Summer	Summer	Coast	Coast	Coastal	Coastal	Ferry	Ferry	R Brights	R Brights	
1979	0.00	0.00	0.03	0.18	0.00	0.00	0.00	0.00	0.03	0.02	0.02	0.00	0.04	0.23	0.03	0.00	0.00	0.00	0.00	0.04	0.23	0.03	0.00	0.00	0.00	0.00	0.00	0.96	
1980	0.00	0.00	0.03	0.14	0.00	0.00	0.00	0.00	0.03	0.02	0.03	0.00	0.04	0.17	0.04	0.00	0.00	0.00	0.00	0.04	0.17	0.04	0.00	0.00	0.00	0.00	0.00	1.02	
1981	0.00	0.00	0.02	0.10	0.00	0.00	0.00	0.00	0.03	0.02	0.03	0.01	0.03	0.16	0.04	0.00	0.00	0.00	0.00	0.03	0.16	0.04	0.00	0.00	0.00	0.01	0.01	0.92	
1982	0.00	0.00	0.02	0.06	0.00	0.00	0.00	0.00	0.03	0.01	0.03	0.00	0.02	0.17	0.04	0.00	0.00	0.00	0.00	0.02	0.17	0.04	0.00	0.00	0.00	0.01	0.01	1.09	
1983	0.00	0.00	0.02	0.09	0.00	0.00	0.00	0.00	0.03	0.01	0.04	0.00	0.03	0.26	0.03	0.00	0.00	0.00	0.00	0.03	0.26	0.03	0.00	0.00	0.00	0.02	0.02	1.30	
1984	0.00	0.00	0.02	0.20	0.00	0.00	0.00	0.00	0.03	0.01	0.04	0.00	0.03	0.36	0.04	0.00	0.00	0.00	0.00	0.03	0.36	0.04	0.00	0.00	0.00	0.02	0.02	1.48	
1985	0.00	0.00	0.02	0.24	0.00	0.00	0.00	0.00	0.03	0.01	0.03	0.00	0.03	0.34	0.04	0.00	0.00	0.00	0.00	0.03	0.34	0.04	0.00	0.00	0.00	0.01	0.01	1.34	
1986	0.00	0.00	0.03	0.35	0.00	0.00	0.00	0.00	0.03	0.01	0.04	0.00	0.03	0.36	0.05	0.00	0.00	0.00	0.00	0.03	0.36	0.05	0.00	0.00	0.00	0.02	0.02	1.51	
1987	0.00	0.00	0.04	0.49	0.00	0.00	0.00	0.00	0.03	0.02	0.05	0.01	0.03	0.40	0.06	0.00	0.00	0.00	0.00	0.03	0.40	0.06	0.00	0.00	0.00	0.07	0.07	1.76	
1988	0.00	0.00	0.05	0.53	0.00	0.00	0.00	0.00	0.14	0.04	0.06	0.00	0.03	0.38	0.07	0.00	0.00	0.00	0.00	0.03	0.38	0.07	0.00	0.00	0.00	0.14	0.14	2.17	
1989	0.00	0.00	0.06	0.33	0.00	0.00	0.00	0.00	0.05	0.04	0.05	0.00	0.03	0.30	0.08	0.00	0.00	0.00	0.00	0.03	0.30	0.08	0.00	0.00	0.00	0.12	0.12	1.87	
1990	0.00	0.00	0.05	0.25	0.00	0.00	0.00	0.00	0.02	0.02	0.07	0.00	0.03	0.32	0.08	0.00	0.00	0.00	0.00	0.03	0.32	0.08	0.00	0.00	0.00	0.08	0.08	1.90	
1991	0.00	0.00	0.05	0.13	0.00	0.00	0.00	0.00	0.01	0.01	0.05	0.00	0.02	0.29	0.06	0.00	0.00	0.00	0.00	0.02	0.29	0.06	0.00	0.00	0.00	0.05	0.05	1.80	
1992	0.00	0.00	0.05	0.10	0.00	0.00	0.00	0.00	0.02	0.01	0.03	0.00	0.02	0.26	0.05	0.00	0.00	0.00	0.00	0.02	0.26	0.05	0.00	0.00	0.00	0.04	0.04	1.67	
1993	0.00	0.00	0.05	0.18	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.00	0.02	0.25	0.05	0.00	0.00	0.00	0.00	0.02	0.25	0.05	0.00	0.00	0.00	0.05	0.05	1.68	
1994	0.00	0.00	0.05	0.21	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.02	0.29	0.05	0.00	0.00	0.00	0.00	0.02	0.29	0.05	0.00	0.00	0.00	0.05	0.05	1.58	
1995	0.00	0.00	0.04	0.13	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.02	0.21	0.04	0.00	0.00	0.00	0.00	0.02	0.21	0.04	0.00	0.00	0.00	0.04	0.04	1.06	
1996	0.00	0.00	0.04	0.13	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.02	0.17	0.05	0.00	0.00	0.00	0.00	0.02	0.17	0.05	0.00	0.00	0.00	0.05	0.05	0.94	
1997	0.00	0.00	0.03	0.18	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.02	0.20	0.05	0.00	0.00	0.00	0.00	0.02	0.20	0.05	0.00	0.00	0.00	0.09	0.09	1.25	
1998	0.00	0.00	0.02	0.12	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.02	0.16	0.04	0.00	0.00	0.00	0.00	0.02	0.16	0.04	0.00	0.00	0.00	0.06	0.06	1.20	
1999	0.00	0.00	0.02	0.21	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.02	0.15	0.03	0.00	0.00	0.00	0.00	0.02	0.15	0.03	0.00	0.00	0.00	0.06	0.06	1.09	
2000	0.00	0.00	0.02	0.17	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.00	0.04	0.13	0.03	0.00	0.00	0.00	0.00	0.04	0.13	0.03	0.00	0.00	0.00	0.05	0.05	0.97	
2001	0.00	0.00	0.02	0.20	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.00	0.07	0.19	0.03	0.00	0.00	0.00	0.00	0.07	0.19	0.03	0.00	0.00	0.00	0.07	0.07	1.17	
2002	0.00	0.00	0.03	0.31	0.00	0.00	0.00	0.00	0.02	0.02	0.07	0.00	0.10	0.27	0.03	0.00	0.00	0.00	0.00	0.10	0.27	0.03	0.00	0.00	0.00	0.16	0.16	1.76	
2003	0.00	0.00	0.03	0.46	0.00	0.00	0.00	0.00	0.05	0.02	0.04	0.00	0.10	0.36	0.04	0.00	0.00	0.00	0.00	0.10	0.36	0.04	0.00	0.00	0.00	0.22	0.22	2.21	
2004	0.00	0.00	0.04	0.38	0.00	0.00	0.00	0.00	0.03	0.02	0.05	0.00	0.09	0.39	0.05	0.00	0.00	0.00	0.00	0.09	0.39	0.05	0.00	0.00	0.00	0.16	0.16	2.06	
2005	0.00	0.00	0.04	0.37	0.00	0.00	0.00	0.00	0.03	0.01	0.02	0.00	0.09	0.33	0.05	0.00	0.00	0.00	0.00	0.09	0.33	0.05	0.00	0.00	0.00	0.13	0.13	1.81	
2006	0.00	0.00	0.04	0.26	0.00	0.00	0.00	0.00	0.02	0.02	0.03	0.00	0.09	0.20	0.04	0.00	0.00	0.00	0.00	0.09	0.20	0.04	0.00	0.00	0.00	0.11	0.11	1.51	
2007	0.00	0.00	0.03	0.14	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.07	0.12	0.03	0.00	0.00	0.00	0.00	0.07	0.12	0.03	0.00	0.00	0.00	0.08	0.08	1.20	
2008	0.00	0.00	0.03	0.17	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.07	0.08	0.03	0.00	0.00	0.00	0.00	0.07	0.08	0.03	0.00	0.00	0.00	0.09	0.09	1.01	
2009	0.00	0.00	0.03	0.33	0.00	0.00	0.00	0.00	0.02	0.01	0.02	0.00	0.09	0.08	0.03	0.00	0.00	0.00	0.00	0.09	0.08	0.03	0.00	0.00	0.00	0.14	0.14	1.33	
Average	0.00	0.00	0.03	0.23	0.00	0.00	0.00	0.00	0.03	0.01	0.03	0.00	0.04	0.24	0.04	0.00	0.00	0.00	0.00	0.04	0.24	0.04	0.00	0.00	0.00	0.07	0.07	1.44	

Table I.2. Abundance indices (AIs) for the Northern BC troll fishery by stock and year (stock groups 1-15), from CLB 0907. Numbers represent the model stock contribution to the total AI: the summation across all 30 stocks and stock groups equals the AI total for each calendar year.

Year	Alaska South SE	North / Centr	Fraser Early	Fraser Late	WCVI Hatchery	WCVI Natural	Georgia		Georgia St Lwr Hat	Nooksack Fall	Pgt Sd Fing	Pgt Sd NatF	Pgt Sd Year	Nooksack Spring	Skagit Wild	AI Total
							Georgia St Upper	Georgia St Nat								
1979	0 00	0 08	0 07	0 02	0 04	0 05	0 06	0 02	0 02	0 01	0 00	0 00	0 00	0 02	0 01	1 03
1980	0 00	0 09	0 06	0 01	0 05	0 08	0 05	0 02	0 02	0 01	0 00	0 00	0 00	0 00	0 01	0 97
1981	0 00	0 09	0 05	0 02	0 06	0 08	0 06	0 01	0 02	0 01	0 00	0 00	0 00	0 00	0 01	0 94
1982	0 00	0 10	0 05	0 01	0 12	0 11	0 05	0 01	0 02	0 01	0 00	0 00	0 00	0 00	0 01	1 06
1983	0 00	0 11	0 05	0 01	0 17	0 08	0 04	0 01	0 01	0 01	0 00	0 00	0 00	0 00	0 01	1 24
1984	0 00	0 12	0 06	0 02	0 14	0 05	0 05	0 01	0 02	0 01	0 00	0 00	0 00	0 00	0 01	1 41
1985	0 00	0 13	0 08	0 02	0 09	0 03	0 06	0 01	0 02	0 01	0 00	0 00	0 00	0 00	0 01	1 32
1986	0 00	0 15	0 09	0 01	0 06	0 02	0 06	0 00	0 02	0 00	0 00	0 00	0 00	0 00	0 01	1 48
1987	0 00	0 15	0 09	0 01	0 07	0 02	0 07	0 01	0 01	0 00	0 00	0 00	0 00	0 00	0 00	1 75
1988	0 00	0 16	0 08	0 01	0 13	0 03	0 06	0 00	0 01	0 00	0 00	0 00	0 00	0 00	0 01	1 87
1989	0 00	0 17	0 08	0 01	0 20	0 04	0 07	0 01	0 01	0 00	0 00	0 00	0 00	0 00	0 00	1 69
1990	0 00	0 18	0 08	0 01	0 27	0 06	0 05	0 01	0 01	0 00	0 00	0 00	0 00	0 00	0 00	1 65
1991	0 00	0 18	0 08	0 01	0 32	0 07	0 05	0 01	0 01	0 00	0 00	0 00	0 00	0 00	0 00	1 53
1992	0 00	0 17	0 07	0 01	0 31	0 08	0 03	0 01	0 01	0 00	0 00	0 00	0 00	0 00	0 00	1 41
1993	0 00	0 16	0 07	0 01	0 29	0 07	0 03	0 01	0 01	0 00	0 00	0 00	0 00	0 00	0 00	1 43
1994	0 00	0 16	0 08	0 00	0 20	0 05	0 02	0 01	0 01	0 00	0 00	0 00	0 00	0 00	0 00	1 26
1995	0 00	0 15	0 08	0 00	0 07	0 02	0 02	0 01	0 01	0 00	0 00	0 00	0 00	0 00	0 00	0 98
1996	0 00	0 15	0 09	0 01	0 05	0 01	0 02	0 01	0 01	0 00	0 00	0 00	0 00	0 00	0 00	0 93
1997	0 00	0 16	0 11	0 01	0 12	0 03	0 03	0 01	0 01	0 00	0 00	0 00	0 00	0 00	0 00	1 12
1998	0 00	0 16	0 10	0 01	0 13	0 03	0 04	0 00	0 01	0 00	0 00	0 00	0 00	0 00	0 00	1 01
1999	0 00	0 16	0 09	0 01	0 07	0 01	0 05	0 00	0 01	0 00	0 00	0 00	0 00	0 00	0 00	0 95
2000	0 00	0 16	0 08	0 01	0 03	0 00	0 06	0 00	0 01	0 00	0 00	0 00	0 00	0 00	0 01	0 94
2001	0 00	0 17	0 09	0 01	0 06	0 01	0 07	0 00	0 02	0 00	0 00	0 00	0 00	0 00	0 00	1 21
2002	0 00	0 17	0 11	0 01	0 15	0 02	0 07	0 00	0 02	0 00	0 00	0 00	0 00	0 00	0 01	1 70
2003	0 00	0 17	0 12	0 01	0 19	0 02	0 08	0 00	0 01	0 00	0 00	0 00	0 00	0 00	0 01	1 91
2004	0 00	0 18	0 12	0 01	0 21	0 02	0 09	0 00	0 02	0 00	0 00	0 00	0 00	0 00	0 01	1 80
2005	0 00	0 16	0 10	0 01	0 14	0 01	0 09	0 00	0 01	0 00	0 00	0 00	0 00	0 00	0 01	1 55
2006	0 00	0 15	0 11	0 01	0 14	0 02	0 08	0 00	0 02	0 00	0 00	0 00	0 00	0 00	0 01	1 24
2007	0 00	0 14	0 11	0 00	0 12	0 01	0 06	0 00	0 01	0 00	0 01	0 00	0 00	0 00	0 00	0 98
2008	0 00	0 13	0 10	0 00	0 08	0 01	0 07	0 00	0 01	0 00	0 00	0 00	0 00	0 00	0 01	0 93
2009	0 00	0 14	0 10	0 00	0 06	0 01	0 08	0 00	0 01	0 00	0 00	0 00	0 00	0 00	0 01	1 10
Average	0 00	0 15	0 09	0 01	0 13	0 04	0 06	0 01	0 01	0 00	0 00	0 00	0 00	0 00	0 01	1 30

-continued-

Table I.2. Page 2 of 2 (stock groups 16-30).

Year	Stillaguamish Wild	Snohomish Wild	WA Coastal Hat	Col UpRiver Brights	Spring Creek Hat	Lwr Bonneville Hat	Fall Cowitz Hat	Lewis R Wild	Willamette R Hat	Spr Cowitz Hat	Col R Summer	Oregon Coast	WA Coastal Wild	Lyons Ferry	Mid Col R Brights	AI Total
1979	0.00	0.01	0.04	0.12	0.00	0.00	0.02	0.01	0.05	0.01	0.02	0.30	0.05	0.00	0.00	1.03
1980	0.00	0.01	0.04	0.09	0.00	0.00	0.02	0.01	0.06	0.01	0.02	0.24	0.06	0.00	0.00	0.97
1981	0.00	0.00	0.04	0.07	0.00	0.00	0.02	0.01	0.07	0.01	0.02	0.23	0.06	0.00	0.01	0.94
1982	0.00	0.00	0.03	0.04	0.00	0.00	0.02	0.01	0.08	0.01	0.02	0.28	0.06	0.00	0.01	1.06
1983	0.00	0.00	0.03	0.07	0.00	0.00	0.02	0.01	0.09	0.01	0.02	0.41	0.06	0.00	0.02	1.24
1984	0.00	0.00	0.03	0.14	0.00	0.00	0.02	0.01	0.09	0.01	0.02	0.51	0.06	0.00	0.01	1.41
1985	0.00	0.00	0.03	0.16	0.00	0.00	0.02	0.00	0.08	0.00	0.02	0.47	0.07	0.00	0.01	1.32
1986	0.00	0.00	0.05	0.25	0.00	0.00	0.02	0.01	0.10	0.01	0.02	0.49	0.08	0.00	0.02	1.48
1987	0.00	0.00	0.07	0.34	0.00	0.00	0.03	0.02	0.13	0.01	0.02	0.53	0.10	0.00	0.06	1.75
1988	0.00	0.00	0.09	0.33	0.00	0.00	0.08	0.02	0.14	0.01	0.02	0.48	0.12	0.00	0.09	1.87
1989	0.00	0.00	0.09	0.20	0.00	0.00	0.02	0.01	0.14	0.01	0.02	0.41	0.13	0.00	0.07	1.69
1990	0.00	0.00	0.08	0.15	0.00	0.00	0.01	0.01	0.14	0.00	0.01	0.40	0.11	0.00	0.05	1.65
1991	0.00	0.00	0.08	0.08	0.00	0.00	0.01	0.01	0.10	0.00	0.01	0.37	0.10	0.00	0.03	1.53
1992	0.00	0.00	0.09	0.07	0.00	0.00	0.01	0.01	0.07	0.01	0.01	0.33	0.09	0.00	0.03	1.41
1993	0.00	0.00	0.08	0.12	0.00	0.00	0.01	0.00	0.06	0.00	0.01	0.37	0.08	0.00	0.03	1.43
1994	0.00	0.00	0.07	0.13	0.00	0.00	0.00	0.01	0.05	0.00	0.01	0.34	0.08	0.00	0.03	1.26
1995	0.00	0.00	0.07	0.08	0.00	0.00	0.01	0.01	0.04	0.00	0.01	0.29	0.07	0.00	0.03	0.98
1996	0.00	0.00	0.06	0.09	0.00	0.00	0.01	0.01	0.04	0.00	0.01	0.24	0.07	0.00	0.04	0.93
1997	0.00	0.00	0.05	0.12	0.00	0.00	0.01	0.00	0.05	0.00	0.01	0.26	0.07	0.00	0.06	1.12
1998	0.00	0.00	0.03	0.08	0.00	0.00	0.00	0.00	0.05	0.00	0.02	0.22	0.06	0.00	0.04	1.01
1999	0.00	0.00	0.03	0.14	0.00	0.00	0.01	0.00	0.06	0.00	0.03	0.19	0.05	0.00	0.04	0.95
2000	0.00	0.00	0.03	0.11	0.00	0.00	0.00	0.00	0.07	0.00	0.04	0.23	0.04	0.00	0.03	0.94
2001	0.00	0.00	0.03	0.15	0.00	0.00	0.01	0.01	0.11	0.00	0.05	0.30	0.05	0.00	0.05	1.21
2002	0.00	0.00	0.04	0.22	0.00	0.00	0.02	0.01	0.14	0.00	0.06	0.45	0.06	0.00	0.11	1.70
2003	0.00	0.00	0.05	0.30	0.00	0.00	0.03	0.01	0.10	0.01	0.06	0.52	0.07	0.00	0.14	1.91
2004	0.00	0.00	0.06	0.24	0.00	0.00	0.01	0.01	0.09	0.01	0.06	0.50	0.07	0.00	0.10	1.80
2005	0.00	0.00	0.06	0.24	0.00	0.00	0.02	0.01	0.05	0.00	0.05	0.40	0.07	0.00	0.09	1.55
2006	0.00	0.00	0.06	0.16	0.00	0.00	0.01	0.00	0.05	0.01	0.05	0.24	0.06	0.00	0.07	1.24
2007	0.00	0.00	0.05	0.09	0.00	0.00	0.01	0.00	0.04	0.00	0.05	0.15	0.05	0.00	0.05	0.98
2008	0.00	0.00	0.05	0.12	0.00	0.00	0.01	0.00	0.05	0.00	0.05	0.11	0.05	0.00	0.06	0.93
2009	0.00	0.00	0.06	0.22	0.00	0.00	0.02	0.00	0.04	0.00	0.06	0.10	0.05	0.01	0.10	1.10
Average	0.00	0.00	0.05	0.15	0.00	0.00	0.02	0.01	0.08	0.00	0.03	0.33	0.07	0.00	0.05	1.30



Table I.3. Abundance indices (AIs) for the WCVI troll fishery by stock and year (stock groups 1-15), from CLB 0907. Numbers represent the portion of the AI total estimated for each model stock; the summation across all 30 stock groups equals the AI total for each.

Year	Alaska South SE	North / Centr	Fraser Early	Fraser Late	WCVI Hatchery	WCVI Natural	Georgia St Upper	Georgia St Lwr Nat	Georgia St Lwr Hat	Nooksack Fall	Pgt Sd Fing	Pgt Sd NatF	Pgt Sd Year	Nooksack Spring	Skagit Wild	AI Total
1979	0 00	0 00	0 01	0 27	0 01	0 02	0 00	0 01	0 01	0 08	0 04	0 03	0 02	0 00	0 02	1 10
1980	0 00	0 00	0 01	0 21	0 02	0 02	0 00	0 01	0 01	0 09	0 05	0 02	0 03	0 00	0 02	0 96
1981	0 00	0 00	0 00	0 24	0 02	0 03	0 00	0 00	0 01	0 09	0 05	0 02	0 03	0 00	0 02	0 93
1982	0 00	0 00	0 00	0 26	0 04	0 03	0 00	0 00	0 01	0 09	0 05	0 02	0 02	0 00	0 01	1 01
1983	0 00	0 00	0 01	0 23	0 05	0 02	0 00	0 00	0 00	0 10	0 06	0 03	0 02	0 00	0 01	0 95
1984	0 00	0 00	0 01	0 26	0 04	0 01	0 00	0 00	0 01	0 12	0 06	0 03	0 02	0 00	0 02	1 01
1985	0 00	0 00	0 01	0 29	0 03	0 01	0 00	0 00	0 01	0 11	0 05	0 03	0 01	0 00	0 01	0 98
1986	0 00	0 00	0 01	0 23	0 02	0 01	0 00	0 00	0 00	0 09	0 06	0 03	0 01	0 00	0 01	1 03
1987	0 00	0 00	0 01	0 12	0 02	0 01	0 00	0 00	0 00	0 06	0 06	0 04	0 01	0 00	0 01	1 19
1988	0 00	0 00	0 01	0 07	0 04	0 01	0 00	0 00	0 00	0 05	0 07	0 05	0 01	0 00	0 01	1 12
1989	0 00	0 00	0 01	0 18	0 06	0 01	0 00	0 00	0 00	0 07	0 07	0 05	0 01	0 00	0 01	0 98
1990	0 00	0 00	0 01	0 21	0 08	0 02	0 00	0 00	0 00	0 07	0 07	0 05	0 01	0 00	0 01	0 89
1991	0 00	0 00	0 01	0 16	0 09	0 02	0 00	0 00	0 00	0 05	0 05	0 04	0 01	0 00	0 00	0 75
1992	0 00	0 00	0 01	0 21	0 09	0 02	0 00	0 00	0 00	0 03	0 04	0 03	0 00	0 00	0 00	0 78
1993	0 00	0 00	0 01	0 17	0 08	0 02	0 00	0 00	0 00	0 03	0 05	0 02	0 00	0 00	0 00	0 69
1994	0 00	0 00	0 01	0 10	0 05	0 01	0 00	0 00	0 00	0 02	0 05	0 03	0 00	0 00	0 00	0 52
1995	0 00	0 00	0 01	0 05	0 01	0 00	0 00	0 00	0 00	0 02	0 07	0 03	0 00	0 00	0 00	0 41
1996	0 00	0 00	0 01	0 07	0 02	0 00	0 00	0 00	0 00	0 02	0 06	0 03	0 00	0 00	0 00	0 49
1997	0 00	0 00	0 01	0 16	0 04	0 01	0 00	0 00	0 00	0 02	0 05	0 02	0 00	0 00	0 01	0 58
1998	0 00	0 00	0 01	0 18	0 04	0 01	0 00	0 00	0 00	0 02	0 06	0 02	0 00	0 00	0 00	0 56
1999	0 00	0 00	0 01	0 11	0 01	0 00	0 00	0 00	0 00	0 02	0 07	0 02	0 00	0 00	0 01	0 49
2000	0 00	0 00	0 01	0 12	0 01	0 00	0 00	0 00	0 00	0 03	0 06	0 02	0 00	0 00	0 01	0 50
2001	0 00	0 00	0 01	0 11	0 02	0 00	0 00	0 00	0 00	0 03	0 07	0 02	0 00	0 00	0 01	0 77
2002	0 00	0 00	0 01	0 20	0 05	0 01	0 00	0 00	0 00	0 03	0 07	0 02	0 01	0 00	0 01	1 13
2003	0 00	0 00	0 01	0 24	0 06	0 01	0 00	0 00	0 00	0 02	0 06	0 02	0 01	0 00	0 01	1 19
2004	0 00	0 00	0 01	0 15	0 05	0 00	0 00	0 00	0 00	0 01	0 06	0 02	0 01	0 00	0 01	0 98
2005	0 00	0 00	0 01	0 10	0 04	0 00	0 00	0 00	0 00	0 01	0 07	0 01	0 01	0 00	0 01	0 79
2006	0 00	0 00	0 01	0 10	0 04	0 01	0 00	0 00	0 00	0 02	0 09	0 02	0 01	0 00	0 01	0 62
2007	0 00	0 00	0 01	0 08	0 03	0 00	0 00	0 00	0 00	0 02	0 11	0 02	0 01	0 00	0 01	0 53
2008	0 00	0 00	0 01	0 08	0 02	0 00	0 00	0 00	0 00	0 02	0 10	0 02	0 01	0 00	0 01	0 64
2009	0 00	0 00	0 01	0 09	0 02	0 00	0 00	0 00	0 00	0 02	0 09	0 02	0 01	0 00	0 01	0 72
Average	0 00	0 00	0 01	0 16	0 04	0 01	0 00	0 00	0 00	0 05	0 06	0 03	0 01	0 00	0 01	0 82

-continued-

Table I.3. Page 2 of 2 (stock groups 16-30).

Year	Stillaguamish Wild	Snohomish Wild	WA Coastal Hat	Col UpRiver Brights	Spring Creek Hat	Lwr Bonneville Hat	Fall Cowhitz Hat	Lewis R Wild	Willamette R Hat	Spr Cowhitz Hat	Col R Summer	Oregon Coast	WA Coastal Wild	Lyons Ferry	Mid Col R Brights	AI Total
1979	0 00	0 01	0 01	0 05	0 16	0 13	0 08	0 01	0 01	0 01	0 02	0 04	0 01	0 00	0 00	1 10
1980	0 00	0 01	0 01	0 04	0 13	0 10	0 08	0 01	0 01	0 01	0 02	0 03	0 01	0 00	0 00	0 96
1981	0 00	0 01	0 01	0 03	0 12	0 09	0 07	0 01	0 01	0 01	0 02	0 03	0 01	0 00	0 00	0 93
1982	0 00	0 01	0 01	0 03	0 13	0 10	0 09	0 01	0 02	0 01	0 01	0 04	0 01	0 00	0 01	1 01
1983	0 00	0 01	0 01	0 05	0 04	0 09	0 08	0 01	0 02	0 01	0 02	0 06	0 01	0 00	0 01	0 95
1984	0 00	0 01	0 01	0 08	0 05	0 08	0 07	0 01	0 02	0 01	0 02	0 07	0 01	0 00	0 00	1 01
1985	0 00	0 01	0 01	0 10	0 03	0 07	0 08	0 01	0 02	0 01	0 01	0 07	0 01	0 00	0 00	0 98
1986	0 00	0 00	0 01	0 15	0 02	0 12	0 09	0 01	0 02	0 01	0 02	0 07	0 02	0 00	0 01	1 03
1987	0 00	0 00	0 02	0 18	0 01	0 25	0 18	0 02	0 03	0 01	0 02	0 07	0 02	0 00	0 04	1 19
1988	0 00	0 00	0 02	0 14	0 03	0 12	0 27	0 02	0 03	0 01	0 02	0 07	0 03	0 00	0 04	1 12
1989	0 00	0 00	0 02	0 09	0 04	0 05	0 13	0 01	0 03	0 01	0 01	0 06	0 03	0 00	0 03	0 98
1990	0 00	0 00	0 02	0 06	0 04	0 03	0 05	0 01	0 03	0 01	0 01	0 06	0 02	0 00	0 02	0 89
1991	0 00	0 00	0 02	0 04	0 05	0 05	0 04	0 01	0 02	0 01	0 01	0 05	0 02	0 00	0 01	0 75
1992	0 00	0 00	0 02	0 05	0 04	0 06	0 05	0 01	0 01	0 01	0 01	0 05	0 02	0 00	0 01	0 78
1993	0 00	0 00	0 02	0 06	0 02	0 03	0 04	0 00	0 01	0 00	0 01	0 05	0 02	0 00	0 02	0 69
1994	0 00	0 00	0 01	0 05	0 02	0 02	0 02	0 01	0 01	0 00	0 01	0 05	0 01	0 00	0 01	0 52
1995	0 00	0 00	0 01	0 04	0 02	0 02	0 03	0 00	0 01	0 00	0 01	0 04	0 01	0 00	0 01	0 41
1996	0 00	0 00	0 01	0 06	0 03	0 02	0 04	0 00	0 01	0 00	0 01	0 04	0 01	0 00	0 02	0 49
1997	0 00	0 00	0 01	0 05	0 02	0 02	0 03	0 00	0 01	0 00	0 01	0 03	0 01	0 00	0 03	0 58
1998	0 00	0 00	0 01	0 05	0 02	0 02	0 02	0 00	0 01	0 00	0 01	0 03	0 01	0 00	0 02	0 56
1999	0 00	0 00	0 01	0 07	0 03	0 01	0 02	0 00	0 01	0 00	0 02	0 03	0 01	0 00	0 02	0 49
2000	0 00	0 00	0 01	0 06	0 02	0 02	0 02	0 01	0 01	0 00	0 03	0 03	0 01	0 00	0 02	0 50
2001	0 00	0 00	0 01	0 09	0 10	0 06	0 04	0 01	0 03	0 00	0 04	0 05	0 01	0 01	0 04	0 77
2002	0 00	0 00	0 01	0 13	0 18	0 07	0 07	0 01	0 03	0 01	0 06	0 07	0 01	0 01	0 06	1 13
2003	0 00	0 00	0 01	0 13	0 18	0 06	0 10	0 01	0 02	0 01	0 05	0 08	0 01	0 01	0 06	1 19
2004	0 00	0 00	0 01	0 12	0 17	0 04	0 08	0 01	0 02	0 01	0 05	0 07	0 02	0 01	0 05	0 98
2005	0 00	0 00	0 01	0 11	0 10	0 02	0 08	0 01	0 01	0 01	0 05	0 05	0 01	0 01	0 04	0 79
2006	0 00	0 00	0 01	0 07	0 03	0 01	0 04	0 00	0 01	0 01	0 05	0 03	0 01	0 01	0 03	0 62
2007	0 00	0 00	0 01	0 05	0 02	0 01	0 03	0 00	0 01	0 00	0 04	0 02	0 01	0 01	0 03	0 53
2008	0 00	0 00	0 01	0 08	0 08	0 02	0 04	0 00	0 01	0 00	0 04	0 02	0 01	0 01	0 04	0 64
2009	0 00	0 00	0 01	0 10	0 05	0 03	0 07	0 00	0 01	0 00	0 05	0 01	0 01	0 01	0 05	0 72
Average	0 00	0 00	0 01	0 08	0 06	0 06	0 07	0 01	0 02	0 01	0 02	0 05	0 01	0 00	0 02	0 82



**Appendix J. Fishery exploitation rate indices by stock, age and fishery, based on CWT data, 1975–2007.**

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Table J.1. Alaska troll Stratified Proportion Fishery Index (SPFI) values as landed catch, based on CWT data.

YEAR	SPFI	WIN/SPR	JUNE IN	JUNE OUT	JULY IN	JULY OUT	FALL	ER Stock Identifiers			
1979	0.90	1.17	0.64	1.11	0.52	0.85	0.85	Alaska Southeast	Age 4	Age 5	Age 6
1980	1.11	0.63	1.20	0.86	0.97	1.32	1.32	Quinsam	Age 4	Age 5	
1981	1.10	1.18	0.65	1.07	1.25	1.16	1.16	Robertson Creek	Age 3	Age 4	Age 5
1982	0.90	1.02	1.51	0.96	1.27	0.67	0.67	Salmon River Hatchery	Age 4	Age 5	
1983	0.98	1.00	0.92	0.69	1.14	1.29	1.29	Columbia Upriver Brights	Age 4	Age 5	
1984	0.70	0.38	1.67	1.05	0.42	0.52	0.52	Willamette Spring Hatchery	Age 4	Age 5	
1985	0.74	0.46	1.23	0.65	1.00	0.80	0.80				
1986	0.51	0.42	0.59	0.18	0.76	1.23	1.23				
1987	0.54	0.60	0.82	0.19	1.65	0.66	0.66				
1988	0.47	1.42	0.20	0.00	1.64	0.68	0.68				
1989	0.53	0.86	0.65	0.13	0.73	0.59	0.59				
1990	0.80	0.67	1.29	0.12	1.58	1.20	1.20				
1991	0.65	1.50	1.33	0.23	0.68	0.78	0.78				
1992	0.44	1.07	0.79	0.08	0.31	0.40	0.40				
1993	0.49	0.77	0.43	0.02	0.35	0.93	0.93				
1994	0.47	0.70	0.18	0.04	0.23	0.70	0.70				
1995	0.57	0.51	0.50	0.06	1.36	0.85	0.85				
1996	0.49	0.60	1.01	0.10	0.71	0.58	0.58				
1997	0.68	0.66	0.90	0.16	0.11	1.57	1.57				
1998	0.45	0.85	0.23	0.06	0.54	1.01	1.01				
1999	0.69	0.85	0.41	0.13	0.17	1.06	1.06				
2000	0.49	0.97	0.14	0.09	0.08	1.50	1.50				
2001	0.40	0.60	0.18	0.08	0.18	0.66	0.66				
2002	0.56	0.44	0.15	0.07	0.21	1.20	1.20				
2003	0.53	0.72	0.17	0.07	0.42	0.91	0.91				
2004	0.46	0.83	0.26	0.08	0.38	0.95	0.95				
2005	0.53	0.93	0.31	0.13	0.58	1.28	1.28				
2006	0.70	1.53	1.13	0.13	0.16	1.39	1.39				
2007	0.53	1.20	1.22	0.13	0.19	0.88	0.88				

Table J.2. Alaska troll Stratified Proportion Fishery Index (SPFI) values as total mortality, based on CWT data.

YEAR	SPFI	WIN/SPR	JUNE IN	JUNE OUT	JULY IN	JULY OUT	FALL	ER Stock Identifiers			
1979	0.88	1.13	0.63	1.10	0.49	0.62	0.62	Alaska Southeast	Age 4	Age 5	Age 6
1980	1.02	0.60	1.11	0.82	0.80	1.18	1.18	Qunsam	Age 4	Age 5	
1981	1.11	1.18	0.68	1.11	1.11	1.18	1.18	Robertson Creek	Age 3	Age 4	Age 5
1982	1.00	1.08	1.58	0.98	1.60	0.81	0.81	Salmon River Hatchery	Age 4	Age 5	
1983	1.10	0.97	1.01	0.71	0.99	1.72	1.72	Columbia Upriver Brights	Age 4	Age 5	
1984	0.69	0.39	1.67	1.06	0.42	0.51	0.51	Willamette Spring Hatchery	Age 4	Age 5	
1985	0.86	0.48	1.19	0.63	0.93	1.09	1.09				
1986	0.60	0.47	0.61	0.18	0.85	1.54	1.54				
1987	0.63	0.62	0.76	0.18	2.79	0.80	0.80				
1988	0.48	1.35	0.22	0.01	1.90	0.69	0.69				
1989	0.59	0.83	0.64	0.12	1.05	0.64	0.64				
1990	1.06	0.85	1.39	0.15	1.52	1.69	1.69				
1991	0.70	1.42	1.25	0.22	1.00	0.84	0.84				
1992	0.53	1.01	0.73	0.07	0.34	0.62	0.62				
1993	0.57	0.74	0.40	0.02	0.38	1.16	1.16				
1994	0.59	0.68	0.22	0.04	0.35	0.97	0.97				
1995	0.70	0.51	0.52	0.06	1.46	1.07	1.07				
1996	0.61	0.60	0.97	0.11	0.78	0.75	0.75				
1997	0.69	0.65	0.84	0.16	0.15	1.55	1.55				
1998	0.44	0.82	0.23	0.06	0.46	0.97	0.97				
1999	0.73	0.84	0.39	0.13	0.20	1.13	1.13				
2000	0.51	0.97	0.15	0.10	0.12	1.56	1.56				
2001	0.43	0.59	0.17	0.08	0.24	0.72	0.72				
2002	0.55	0.47	0.16	0.07	0.23	1.15	1.15				
2003	0.51	0.73	0.17	0.08	0.37	0.66	0.66				
2004	0.46	0.82	0.25	0.08	0.38	0.93	0.93				
2005	0.55	1.02	0.40	0.14	0.52	1.27	1.27				
2006	0.70	1.47	1.11	0.13	0.17	1.39	1.39				
2007	0.54	1.11	1.15	0.12	0.16	0.92	0.92				

Table J.3. Landed catch exploitation rate indices by stock and age in the NBC troll fishery, based on CWT data. Base period is 1979-1982.

	AKS	QUI	QUI	RBT	RBT	RBT	SRH	SRH	SRH	URB	URB	URB	WSH	
Year	Age 4	Age 3	Age 4	Age 3	Age 4	Age 5	Age 3	Age 4	Age 5	Age 3	Age 4	Age 5	Age 4	Fishery Index
1979	NA	0.54	0.87	1.22	0.83	0.48	NA	NA	NA	0.46	1.18	NA	0.64	0.78
1980	NA	0.80	0.98	1.12	0.85	0.78	0.98	NA	NA	1.11	0.99	1.28	1.18	0.96
1981	NA	1.77	1.45	0.75	1.05	1.74	1.59	1.11	NA	NA	1.14	1.31	1.53	1.33
1982	1.00	0.88	0.70	0.91	1.28	NA	0.43	0.89	1.00	1.43	0.70	0.42	0.65	0.85
1983	1.79	1.27	1.49	1.04	0.71	0.60	0.42	0.53	1.23	1.81	1.32	NA	1.30	0.89
1984	1.23	0.25	0.51	0.41	1.36	2.03	NA	0.60	2.73	1.04	2.09	NA	0.49	1.30
1985	0.77	0.24	0.58	0.89	1.91	NA	0.30	NA	2.24	1.41	1.67	1.67	0.21	1.26
1986	0.76	0.93	0.85	NA	1.05	NA	0.09	0.54	NA	1.14	1.37	1.98	NA	0.87
1987	0.63	0.35	0.62	0.49	NA	NA	0.16	0.37	2.28	1.22	1.96	2.88	0.54	1.05
1988	2.05	0.19	0.70	0.33	0.62	NA	NA	0.30	0.75	0.38	1.06	1.94	0.76	0.68
1989	0.97	0.44	0.46	0.36	0.88	1.04	0.11	0.26	2.13	NA	1.02	4.20	0.36	0.99
1990	2.06	0.36	0.96	0.31	0.71	0.56	0.14	0.23	1.97	NA	1.22	2.37	0.29	0.81
1991	0.68	0.41	0.66	0.39	0.75	1.13	0.11	0.38	2.04	NA	NA	NA	0.27	0.76
1992	0.14	NA	1.87	0.30	0.59	0.69	0.10	0.24	0.96	NA	NA	NA	0.10	0.60
1993	0.30	NA	NA	0.18	0.62	0.83	0.11	0.57	2.31	0.00	1.13	NA	0.20	0.79
1994	0.06	NA	NA	0.33	0.74	0.89	0.17	0.51	2.14	NA	0.96	2.03	0.11	0.89
1995	0.00	NA	NA	NA	0.41	0.26	0.10	0.00	0.85	NA	NA	0.56	0.18	0.31
1996	0.00	NA	NA	0.00	NA	NA	0.00	0.00	0.00	0.00	0.00	NA	0.00	0.00
1997	0.00	0.39	0.39	0.22	0.41	NA	0.12	0.11	0.45	NA	0.65	NA	0.26	0.31
1998	0.00	0.00	0.00	0.00	0.57	NA	0.07	0.52	1.29	0.00	NA	1.59	0.00	0.52
1999	0.00	0.11	0.12	NA	0.21	0.32	0.05	0.11	0.24	NA	0.69	NA	0.00	0.21
2000	0.00	0.00	0.04	NA	NA	NA	0.03	0.20	0.28	NA	0.00	0.00	0.01	0.11
2001	0.00	0.00	0.01	0.00	NA	NA	0.04	0.16	0.89	0.00	0.00	NA	0.02	0.20
2002	0.49	0.00	0.13	0.00	0.46	NA	0.15	0.29	1.50	0.10	0.19	NA	0.18	0.40
2003	0.00	0.00	0.00	0.05	0.05	0.00	0.04	0.28	0.52	0.00	0.72	0.83	0.05	0.22
2004	0.88	0.00	0.06	0.08	0.19	0.38	0.07	0.24	0.94	0.00	0.74	1.34	0.18	0.38
2005	0.19	0.07	0.04	0.03	0.32	0.11	0.08	0.42	0.96	0.12	1.46	1.06	0.09	0.42
2006	0.40	0.06	0.07	0.10	0.26	0.27	0.01	0.41	1.44	NA	1.41	1.54	0.05	0.52
2007	0.09	0.00	0.43	NA	0.44	0.64	NA	0.12	1.14	NA	1.15	NA	0.00	0.51

Stock Identifiers

AKS = ALASKA SPRING

RBT = ROBERTSON CREEK

URB = COLUMBIA UPRIVER BRIGHT

QUI = QUINSAM

SRH = SALMON RIVER HATCHERY

WSH = WILLAMETTE SPRING

Table J.4. Total mortality exploitation rate indices by stock and age in the NBC troll fishery, based on CWT data. Base period is 1979-1982.

	AKS	QUI	QUI	RBT	RBT	RBT	SRH	SRH	SRH	URB	URB	URB	WSH	
Year	Age 4	Age 3	Age 4	Age 3	Age 4	Age 5	Age 3	Age 4	Age 5	Age 3	Age 4	Age 5	Age 4	Fishery Index
1979	NA	0.58	0.84	1.24	0.84	0.47	NA	NA	NA	0.58	1.19	NA	0.60	0.79
1980	NA	0.60	0.98	1.03	0.85	0.78	0.97	NA	NA	1.08	0.99	1.27	1.11	0.95
1981	NA	1.75	1.46	0.76	1.04	1.75	1.51	1.11	NA	NA	1.14	1.32	1.54	1.32
1982	1.00	0.87	0.71	0.97	1.27	NA	0.52	0.89	1.00	1.34	0.68	0.41	0.75	0.86
1983	1.58	1.14	1.47	0.91	0.70	0.61	0.48	0.54	1.23	1.54	1.29	NA	1.11	0.87
1984	1.03	0.24	0.51	0.45	1.33	2.05	NA	0.61	2.77	0.95	2.08	NA	0.42	1.25
1985	0.67	0.24	0.57	0.94	1.88	NA	0.32	NA	2.27	1.20	1.66	1.64	0.18	1.19
1986	0.64	0.86	0.82	NA	1.03	NA	0.12	0.53	NA	1.00	1.36	1.94	NA	0.83
1987	0.59	0.43	0.66	0.48	NA	NA	0.18	0.37	2.38	1.64	2.01	2.90	0.60	1.04
1988	1.90	0.27	0.72	0.33	0.62	NA	NA	0.31	0.75	0.83	1.10	1.98	0.76	0.70
1989	0.85	0.46	0.47	0.39	0.87	1.05	0.21	0.27	2.19	NA	1.08	4.20	0.32	0.97
1990	2.09	0.49	0.99	0.39	0.73	0.57	0.24	0.25	2.04	NA	1.30	2.43	0.28	0.82
1991	0.67	0.52	0.67	0.47	0.76	1.15	0.23	0.39	2.11	NA	NA	NA	0.26	0.77
1992	0.19	NA	1.94	0.41	0.60	0.71	0.14	0.25	1.00	NA	NA	NA	0.10	0.61
1993	0.23	NA	NA	0.33	0.63	0.85	0.22	0.58	2.38	0.30	1.18	NA	0.19	0.80
1994	0.12	NA	NA	0.51	0.75	0.91	0.29	0.51	2.20	NA	0.99	2.08	0.12	0.90
1995	0.07	NA	NA	NA	0.42	0.28	0.17	0.02	0.92	NA	NA	0.60	0.21	0.33
1996	0.12	NA	NA	0.07	NA	NA	0.06	0.01	0.06	0.28	0.06	NA	0.01	0.05
1997	0.00	0.38	0.38	0.25	0.40	NA	0.12	0.11	0.45	NA	0.66	NA	0.21	0.30
1998	0.00	0.00	0.00	0.10	0.57	NA	0.15	0.52	1.31	0.06	NA	1.56	0.00	0.50
1999	0.00	0.11	0.11	NA	0.20	0.33	0.06	0.11	0.24	NA	0.69	NA	0.00	0.20
2000	0.00	0.00	0.04	NA	NA	NA	0.04	0.20	0.28	NA	0.00	0.00	0.01	0.10
2001	0.05	0.00	0.01	0.00	NA	NA	0.05	0.16	0.89	0.00	0.00	NA	0.02	0.18
2002	0.53	0.00	0.13	0.03	0.46	NA	0.17	0.29	1.54	0.14	0.19	NA	0.18	0.38
2003	0.07	0.00	0.00	0.04	0.05	0.00	0.07	0.28	0.53	0.14	0.74	0.85	0.05	0.22
2004	0.81	0.00	0.05	0.11	0.20	0.40	0.12	0.25	1.00	0.13	0.75	1.39	0.17	0.39
2005	0.21	0.06	0.04	0.06	0.32	0.11	0.14	0.43	1.00	0.50	1.51	1.11	0.08	0.43
2006	0.38	0.05	0.06	0.13	0.26	0.27	0.12	0.41	1.47	NA	1.43	1.53	0.03	0.51
2007	0.11	0.07	0.44	NA	0.44	0.63	NA	0.12	1.18	NA	1.18	NA	0.00	0.50

Stock Identifiers

AKS = ALASKA SPRING  
RBT = ROBERTSON CREEK  
URB = COLUMBIA UPRIVER BRIGHT

QUI = QUINSAM  
SRH = SALMON RIVER HATCHERY  
WSH = WILLAMETTE SPRING

Table J.5. Landed catch exploitation rate indices by stock and age in the WCVI troll fishery, based on CWT data. Base period is 1979-1982.

Year	CWF Age 4	GAD Age 3	GAD Age 4	LRH Age 3	LRH Age 4	LRW Age 4	RBT Age 3	RBT Age 4	RBT Age 5	SAM Age 3	SAM Age 4	SPR Age 3	SPR Age 4	SPS Age 3	SPS Age 4	SRH Age 3	SRH Age 4	SRH Age 5	SUM Age 4	URB Age 3	URB Age 4	UWA Age 3	UWA Age 4	WSH Age 4	CHI Age 3	CHI Age 4	Fishery Index
1979	NA	NA	NA	1.12	NA	NA	1.15	1.27	NA	NA	1.00	1.00	0.95	NA	1.13	NA	NA	NA	NA	1.40	1.78	0.71	1.19	1.02	NA	NA	1.05
1980	NA	NA	NA	0.96	0.97	NA	1.38	1.42	NA	NA	NA	NA	1.19	NA	NA	1.00	NA	NA	0.60	1.34	0.93	1.34	0.94	1.06	NA	NA	1.03
1981	0.78	0.72	NA	1.14	0.78	0.84	0.70	0.98	1.00	NA	NA	NA	0.95	0.71	NA	NA	1.00	NA	1.31	0.20	0.68	0.83	0.92	0.63	NA	NA	0.88
1982	1.22	1.28	1.00	1.18	1.28	1.18	0.77	0.73	NA	1.00	NA	NA	0.91	1.38	0.87	NA	NA	NA	NA	1.06	0.43	1.11	1.08	1.37	NA	NA	1.08
1983	1.41	NA	1.40	1.70	1.85	0.97	0.31	0.86	2.81	NA	0.95	NA	1.80	1.04	0.90	0.81	0.73	NA	NA	0.36	0.44	0.88	0.88	0.36	NA	NA	1.18
1984	1.35	2.07	NA	2.19	2.82	NA	1.30	1.07	1.71	NA	NA	1.09	1.38	1.83	0.97	NA	0.82	NA	NA	0.88	1.32	1.70	0.75	0.95	NA	NA	1.46
1985	0.94	NA	0.83	1.24	1.10	NA	0.83	0.00	NA	NA	NA	NA	0.94	0.82	0.88	NA	NA	NA	NA	0.78	1.04	0.88	1.08	0.47	NA	NA	0.88
1986	1.32	NA	NA	1.27	1.19	0.47	NA	0.97	NA	NA	NA	NA	1.21	0.80	1.07	NA	0.42	NA	NA	1.52	0.73	0.84	1.18	NA	NA	NA	1.07
1987	0.88	NA	NA	0.85	NA	1.45	0.27	NA	NA	NA	NA	NA	0.47	0.78	0.91	0.12	0.48	NA	0.80	1.00	0.88	0.37	0.42	NA	NA	NA	0.98
1988	0.88	0.43	NA	1.13	1.33	1.06	0.46	0.97	NA	0.82	NA	NA	1.01	0.30	0.80	NA	1.41	NA	1.15	0.06	1.80	NA	0.80	0.85	NA	NA	0.93
1989	0.54	0.25	0.49	0.29	0.85	0.89	0.17	0.34	0.00	0.21	0.80	NA	0.88	0.38	0.38	0.15	NA	NA	0.75	NA	0.80	NA	NA	0.53	NA	NA	0.47
1990	0.73	1.10	0.94	1.17	0.41	1.20	0.87	0.88	1.54	0.42	0.88	NA	0.94	0.75	0.82	0.31	0.95	NA	1.34	NA	1.82	NA	NA	0.82	NA	NA	0.87
1991	NA	NA	0.94	0.81	NA	0.74	0.81	0.55	0.74	0.28	0.57	1.18	0.81	0.42	0.52	0.41	0.79	NA	0.45	NA	NA	NA	NA	0.88	NA	NA	0.88
1992	1.18	NA	0.45	0.88	NA	0.32	1.70	2.47	5.23	1.08	0.27	NA	0.44	0.75	0.72	0.88	5.81	NA	0.75	NA	NA	NA	NA	0.19	NA	NA	0.82
1993	NA	NA	NA	1.11	0.88	NA	1.17	2.28	2.45	1.14	0.42	NA	0.55	1.08	0.52	0.53	2.94	NA	NA	0.84	1.85	NA	NA	0.42	NA	NA	0.87
1994	0.12	NA	NA	NA	NA	0.22	0.81	0.73	1.40	0.08	0.70	NA	0.85	0.22	0.46	NA	0.85	NA	NA	NA	0.88	NA	NA	0.25	NA	NA	0.88
1995	NA	0.22	NA	NA	NA	0.43	NA	0.44	0.38	0.18	0.38	NA	0.38	0.38	0.38	0.02	NA	NA	NA	NA	NA	NA	NA	0.14	NA	NA	0.32
1996	0.00	0.00	0.00	0.00	NA	NA	0.00	NA	NA	0.00	0.00	NA	0.00	0.00	0.00	0.00	0.00	NA	0.00	0.00	0.00	NA	NA	0.00	NA	NA	0.00
1997	0.35	NA	0.21	0.73	NA	NA	0.00	0.08	NA	0.02	0.23	NA	0.51	0.03	0.28	0.08	0.08	NA	0.07	NA	0.08	NA	NA	0.60	NA	NA	0.38
1998	NA	NA	NA	NA	NA	NA	0.00	0.00	NA	NA	0.08	NA	0.05	0.00	0.03	0.00	0.00	NA	0.00	0.02	NA	NA	NA	0.03	NA	NA	0.00
1999	NA	0.05	NA	0.10	NA	NA	NA	NA	0.00	NA	0.08	NA	0.02	0.02	0.08	0.00	0.00	NA	0.03	0.00	0.00	NA	NA	0.00	NA	NA	0.08
2000	NA	NA	1.15	0.10	1.84	NA	NA	NA	NA	NA	NA	NA	0.04	0.03	0.68	0.00	0.00	NA	0.21	0.06	0.31	NA	NA	0.08	NA	NA	0.63
2001	NA	0.78	1.18	0.33	NA	0.72	0.00	NA	NA	0.42	0.37	NA	0.18	0.48	0.48	0.00	0.08	NA	0.42	0.06	0.17	NA	NA	0.17	NA	NA	0.48
2002	0.83	0.17	0.88	0.37	0.80	NA	0.02	0.00	NA	0.28	0.41	NA	0.30	0.44	0.55	0.00	0.00	NA	0.54	0.00	0.21	NA	NA	0.33	NA	NA	0.47
2003	0.57	0.12	0.74	0.31	0.94	0.12	0.00	0.00	NA	NA	0.58	NA	0.31	0.36	0.57	0.00	0.00	NA	0.81	0.18	0.10	NA	NA	0.08	NA	NA	0.90
2004	NA	0.06	1.18	0.40	1.07	0.13	0.03	0.02	0.00	0.18	0.54	NA	0.34	0.36	0.83	0.08	0.08	NA	0.28	0.18	0.80	NA	NA	2.13	NA	NA	0.81
2005	0.33	0.77	0.88	0.74	1.73	0.12	0.00	0.00	NA	0.12	0.80	NA	0.70	0.58	0.78	0.07	0.08	NA	0.35	0.13	0.47	NA	NA	1.25	NA	NA	0.75
2006	NA	0.28	0.84	NA	NA	0.43	0.80	0.60	0.80	0.37	0.78	NA	0.88	0.40	0.72	0.03	0.57	NA	0.33	NA	0.73	NA	NA	1.38	NA	NA	0.71
2007	NA	0.43	0.72	0.90	NA	NA	NA	0.02	NA	0.48	0.85	NA	0.42	0.45	0.83	NA	0.00	NA	0.43	NA	0.11	NA	NA	0.15	NA	NA	0.53

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 CHI = CHILLAWACK



Table J.6. Total mortality exploitation rate indices by stock and age in the WCVI troll fishery, based on CWT data. Base period is 1979-1982.

	CWF	QAD	QAD	LRH	LRH	LRW	RBT	RBT	RBT	SAM	SAM	SAM	SPR	SPR	SPS	SPS	SRH	SRH	SRH	SUM	URB	URB	UWA	UWA	WSH	CHI	CHI	
Year	Age 4	Age 3	Age 4	Age 3	Age 4	Age 4	Age 3	Age 4	Age 5	Age 3	Age 4	Age 5	Age 3	Age 4	Age 3	Age 4	Age 3	Age 4	Age 5	Age 4	Age 3	Age 4	Age 3	Age 4	Age 4	Age 3	Age 4	Fishery Index
1979	NA	NA	NA	1.12	NA	NA	1.23	1.29	NA	NA	1.00	1.00	0.94	0.84	NA	1.13	NA	NA	NA	NA	1.38	1.78	0.86	1.18	0.97	NA	NA	1.04
1980	NA	NA	NA	0.98	0.98	NA	1.32	1.40	NA	NA	NA	NA	1.14	1.38	NA	NA	1.00	NA	NA	0.89	1.33	0.94	1.30	0.83	1.07	NA	NA	1.02
1981	0.79	0.72	NA	1.12	0.77	0.85	0.68	0.58	1.00	NA	NA	NA	0.90	0.83	0.75	NA	NA	1.00	NA	1.31	0.25	0.88	0.80	0.90	0.65	NA	NA	0.85
1982	1.31	1.28	1.08	1.39	1.27	1.15	0.78	0.73	NA	1.00	NA	NA	1.02	1.14	1.25	0.87	NA	NA	NA	NA	1.05	0.44	1.20	1.09	1.30	NA	NA	1.08
1983	1.35	NA	1.08	1.50	1.58	0.97	0.31	0.86	2.40	NA	0.98	NA	1.33	0.80	1.54	0.89	0.81	0.71	NA	NA	0.36	0.42	0.85	0.98	0.28	NA	NA	1.12
1984	1.30	1.68	NA	1.88	2.70	NA	1.18	1.04	1.08	NA	NA	1.08	1.19	1.34	1.42	0.95	NA	0.75	NA	NA	0.80	1.28	1.53	0.74	0.81	NA	NA	1.38
1985	0.88	NA	0.83	1.07	1.07	NA	0.54	0.00	NA	NA	NA	NA	0.52	0.82	0.73	0.65	NA	NA	NA	NA	0.72	1.01	0.81	1.07	0.42	NA	NA	0.84
1986	1.26	NA	NA	1.08	1.14	0.44	NA	0.53	NA	NA	NA	NA	1.10	0.86	0.82	1.04	NA	0.36	NA	NA	1.38	0.72	0.78	1.14	NA	NA	NA	1.01
1987	0.87	NA	NA	1.08	NA	1.43	0.27	NA	NA	NA	NA	NA	0.43	NA	0.84	0.52	0.13	0.49	NA	0.00	1.13	1.00	0.37	0.41	NA	NA	NA	0.82
1988	0.98	0.47	NA	1.38	1.40	1.08	0.44	0.57	NA	0.88	NA	NA	0.94	NA	0.37	0.71	NA	1.32	NA	1.12	0.52	1.99	NA	0.80	0.85	NA	NA	0.95
1989	0.94	0.36	0.85	0.31	0.87	0.57	0.17	0.33	0.00	0.34	0.81	NA	0.59	0.39	0.38	0.38	0.18	NA	NA	0.75	NA	0.94	NA	NA	0.51	NA	NA	0.48
1990	0.74	1.08	0.88	1.12	0.84	1.22	0.85	0.58	1.49	0.48	0.85	NA	0.88	0.72	0.89	0.83	0.36	0.87	NA	1.31	NA	1.84	NA	NA	0.80	NA	NA	0.87
1991	NA	NA	0.87	0.71	NA	0.75	0.80	0.55	0.71	0.41	0.58	1.10	0.58	0.83	0.51	0.53	0.43	0.74	NA	0.44	NA	NA	NA	NA	0.86	NA	NA	0.87
1992	1.14	NA	0.47	0.73	NA	0.33	1.85	2.49	5.04	0.91	0.27	NA	0.48	0.74	0.72	0.71	0.86	4.98	NA	0.78	NA	NA	NA	NA	0.22	NA	NA	0.83
1993	NA	NA	NA	1.08	0.71	NA	1.39	2.28	2.36	1.08	0.44	NA	0.57	0.98	1.05	0.52	0.89	2.45	NA	NA	0.91	1.98	NA	NA	0.41	NA	NA	0.90
1994	0.11	NA	NA	NA	NA	0.24	0.87	0.78	1.38	0.28	0.70	NA	0.82	0.84	0.23	0.45	NA	0.79	NA	NA	NA	1.01	NA	NA	0.25	NA	NA	0.58
1995	NA	0.28	NA	NA	NA	0.47	NA	0.45	0.38	0.24	0.42	NA	0.40	0.37	0.31	0.27	0.04	NA	NA	NA	NA	NA	NA	NA	0.19	NA	NA	0.35
1996	0.08	0.07	0.02	0.80	NA	NA	0.03	NA	NA	0.08	0.02	NA	0.04	NA	0.08	0.02	0.03	0.02	NA	0.03	0.09	0.08	NA	NA	0.01	NA	NA	0.03
1997	0.33	NA	0.31	0.81	NA	NA	0.00	0.08	NA	0.08	0.24	NA	0.55	0.48	0.12	0.29	0.01	0.07	NA	0.07	NA	0.09	NA	NA	0.00	NA	NA	0.33
1998	NA	NA	NA	NA	NA	NA	NA	0.00	NA	NA	0.08	NA	0.04	0.00	0.00	0.03	0.00	0.00	NA	0.00	0.01	NA	NA	NA	0.03	NA	NA	0.03
1999	NA	0.85	NA	0.98	NA	NA	NA	NA	0.00	NA	0.07	NA	0.01	NA	0.02	0.05	0.00	0.00	NA	0.03	0.00	0.00	NA	NA	0.00	NA	NA	0.04
2000	NA	NA	1.12	0.88	1.77	NA	NA	NA	NA	NA	NA	NA	0.03	0.84	0.02	0.84	0.00	0.00	NA	0.20	0.07	0.29	NA	NA	0.05	NA	NA	0.58
2001	NA	0.88	1.13	0.38	NA	0.86	0.00	NA	NA	0.32	0.35	NA	0.13	0.47	0.38	0.48	0.00	0.07	NA	0.40	0.07	0.18	NA	NA	0.14	NA	NA	0.43
2002	0.80	0.14	0.80	0.31	0.48	NA	0.01	0.00	NA	0.21	0.40	NA	0.25	0.71	0.35	0.54	0.00	0.00	NA	0.52	0.07	0.20	NA	NA	0.28	NA	NA	0.43
2003	0.94	0.98	0.70	0.38	0.80	0.12	0.00	0.00	NA	NA	0.58	NA	0.28	0.98	0.30	0.65	0.00	0.00	NA	0.58	0.14	0.10	NA	NA	0.48	NA	NA	0.48
2004	NA	0.98	1.18	0.34	1.02	0.12	0.02	0.02	0.00	0.12	0.52	NA	0.29	0.76	0.28	0.80	0.07	0.49	NA	0.25	0.13	0.47	NA	NA	1.78	NA	NA	0.58
2005	0.31	0.98	0.88	0.84	1.84	0.11	0.00	0.00	NA	0.09	0.78	NA	0.59	1.01	0.45	0.74	0.07	0.44	NA	0.33	0.11	0.45	NA	NA	1.03	NA	NA	0.89
2006	NA	0.35	0.82	NA	NA	0.44	0.00	0.00	0.00	0.29	0.74	NA	0.58	1.32	0.39	0.70	0.03	0.49	NA	0.32	NA	0.89	NA	NA	1.14	NA	NA	0.86
2007	NA	0.32	0.75	0.91	NA	NA	NA	0.02	NA	0.37	0.54	NA	0.35	0.70	0.35	0.81	NA	0.00	NA	0.41	NA	0.11	NA	NA	0.13	NA	NA	0.48

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